Table 15. AOPC 15: Status of Adjacent or Immediately Upstream Current Ongoing and Potentially Ongoing Upland and Overwater Sources [a]

Site Name	Potential Contaminant Migration Pathway	DEQ PM	ECSI #	River Mile	AOPC	AOPC COIs	Upland and Overwater COIs	Potential Upland and Overwater Sources	DEQ Site Priority Level	DEQ Pathway Priority Level	Status of SCE
Sources Adjacent to AOPC 15 [e]											
McCormick & Baxter	Groundwater	Manzano	74	7E	15	**Metals** (Cu, Ag), **total low PAHs**, **BnOH**, **delta-HCH**	PAHs, metals, Other (e.g., cyanide), SVOCs	Former onsite waste disposal area, former central processing area, former tank farm area, former small waste disposal areas and trench, former dock operations	NFA, Low	High	Complete RI completed Sept. 1992
McCormick & Baxter	Stormwater						PAHs, metals, Other (e.g., cyanide), SVOCs			High	Complete RI completed Sept. 1992
McCormick & Baxter	Overwater						PAHs, metals, Other (e.g., cyanide), SVOCs			High	Complete RI completed Sept. 1992
McCormick & Baxter	Overland Transport						PAHs, metals, Other (e.g., cyanide), SVOCs			High	Complete RI completed Sept. 1992
McCormick & Baxter	Bank Erosion						PAHs, metals, Other (e.g., cyanide), SVOCs			High	Complete RI completed Sept. 1992
Triangle Park	Groundwater						VOCs, SVOCs, PAHs, TPH, pesticide/herbicides, PCBs, metals, phthalates, dioxin/furans, Other (e.g., asbestos)			TBD	Ongoing (under federal PPA, anticipated Summer 2010)

Table 15. AOPC 15: Status of Adjacent or Immediately Upstream Current Ongoing and Potentially Ongoing Upland and Overwater Sources [a]

Site Name	Potential Contaminant Migration Pathway	DEQ PM	ECSI #	River Mile	AOPC	AOPC COIs	Upland and Overwater COIs	Potential Upland and Overwater Sources	DEQ Site Priority Level	DEQ Pathway Priority Level	Status of SCE
Triangle Park	Stormwater	EPA lead	277	7.5E	15		VOCs, SVOCs, PAHs, TPH, pesticide/herbicides, PCBs, metals, phthalates, dioxin/furans, Other (e.g., asbestos)	Former lumber mills, wood processing, rail car servicing, oil and fuel storage, former concrete plant, former sludge disposal pond, former ASTs and USTs, former power plant, possible underground fuel storage vault, former chemical storage areas, oil spill	Medium	Medium	Ongoing (under federal PPA, anticipated Summer 2010)
Triangle Park	Overwater Activities						PAHs, TPH			None	NA

Notes: See last page of table for full list of footnotes.

Triangle Park	Overland Transport						VOCs, SVOCs, PAHs, TPH, pesticide/herbicides, PCBs, metals, phthalates, dioxin/furans, Other (e.g., asbestos)	Former lumber mills, wood		Medium	Ongoing (under federal PPA, anticipated Summer 2010)

Table 15. AOPC 15: Status of Adjacent or Immediately Upstream Current Ongoing and Potentially Ongoing Upland and Overwater Sources [a]

Site Name	Potential Contaminant Migration Pathway	DEQ PM	ECSI #	River Mile	AOPC	AOPC COIs	Upland and Overwater COIs	Potential Upland and Overwater Sources	DEQ Site Priority Level	DEQ Pathway Priority Level	Status of SCE
Triangle Park	Bank Erosion	EPA lead	277	7.5E	15	**Metals** (Cu, Ag), **total low PAHs**, **BnOH**, **delta-HCH**	VOCs, SVOCs, PAHs, TPH, pesticide/herbicides, PCBs, metals, phthalates, dioxin/furans, Other (e.g., asbestos)	processing, rail car servicing, oil and fuel storage, former concrete plant, former sludge disposal pond, former ASTs and USTs, former power plant, possible underground fuel storage vault, former chemical storage areas, oil spill	Medium	Medium	Ongoing (under federal PPA, anticipated Summer 2010)
Triangle Park	Other - Petroleum pipeline enters at south end of site from beneath the river						TPH			Low	Ongoing (under federal PPA, anticipated Summer 2010)
Shared Conveyance Systems											
OF48	Stormwater	Tarnow	2425	7.2E	15	**Metals** (Cu, Ag), **total low PAHs**, **BnOH**, **delta-HCH**	None (City of Portland 2010)	Drains 6 residential acres. No ECSI sites have been identified in this basin.	Low	p Low	p Complete (2010)

Notes: See last page of table for full list of footnotes.

Table 15. AOPC 15: Status of Adjacent or Immediately Upstream Current Ongoing and Potentially Ongoing Upland and Overwater Sources [a]

Site Name	Potential Contaminant Migration Pathway	DEQ PM	ECSI #	River Mile	AOPC	AOPC COIs	Upland and Overwater COIs	Potential Upland and Overwater Sources	DEQ Site Priority Level	DEQ Pathway Priority Level	Status of SCE

Notes:

[a] The information contained in this table is based on information obtained by LWG from correspondence with DEQ project managers and from reports in DEQ files as of ____ 2010. Information on sites upriver of RM 11 and sites within the s
EPA, in the form of 104(e) information requests, and this is not a final list of sources that may be impacting the Study Area.

[b] SCE = Source Control Evaluation. This is the first step in DEQ's source evaluation process. The status of an SCE is either complete, ongoing, not started, TBD, or NA (for a pathway that is not applicable).

[c] SCD = Source Control Decision. DEQ provides EPA and its partners an opportunity to review (but not approve or disapprove) the DEQ SCD; the status of this review is described in the column, Status of EPA Review of SCE Decision, in th

[d] SCM = Source Control Measures. The final step in the source evaluation process; the implementation status of the SCMs is either complete, ongoing, not started, TBD, or NA.

[e] Adjacent sites are those with potential sources/pathways that are immediately adjacent to the reference AOPC, and upstream sites are those potential sources/pathways that are upstream of the reference AOPC and not reference with any other

[f] This pathway is included for ECSI sites that have groundwater infiltration into the City storm sewer. For sites without this pathway, assume there is no groundwater infiltration into the City storm sewer.

p = DEQ's preliminary pathway determination
? = Unknown, typically due to lack of sampling information
Italicized cells indicate upland sites within current or former CSO basins. Non-italicized text indicates upland sites within stormwater basins.
Grey shading indicates shared conveyances.

Reference Citations:

Ader. 2010. Email of January 8, 2010 to S. Trevathan, Integral, from M. Ader, US EPA, regarding status of site characterization work at Triangle Park. U.S. Environmental Protection Agency, Seattle, WA.
AMEC Geomatrix. 2009. Revised Data Gaps Work Plan. Prepared for the University of Portland, OR. AMEC Geomatrix, Inc., Seattle, WA. September 2009
City of Portland. 2010. Stormwater Evaluation Report, City of Portland Outfall Project, ECSI 2425. City of Portland, OR. February 2010.
DEQ. 2009. Portland Harbor Joint Source Control Strategy - Milestone Report. Prepared by the Oregon Department of Environmental Quality, Portland, OR. December 2009.

Acronyms:

AOC = Administrative Order of Consent
AOPC = area of potential concern
AS/SVE = air sparging/soil vapor extraction
AST = aboveground storage tank
BEHP = bis-2-(ethylhexyl) phthalate
BMP = best management practices
BnOH = benzyl alcohol
COI = chemical of interest
CSO = combined sewer overflow
DEQ = Oregon Department Of Environmental Quality
DNAPL = dense non-aqueous phase liquid
ECSI = Environmental Cleanup Site Inventory
EE/CA = engineering evaluation/cost analysis
EIB = in situ bioremediation
EPA = Environmental Protection Agency
FS = feasibility study
GRH = gasoline-range hydrocarbon
GW = groundwater
JSCS = Joint Source Control Strategy
MS4 = municipal separate storm sewer systems
NA = not applicable
NAPL = non-aqueous phase liquid
NFA = no further action
NPDES = National Pollutant Discharge Elimination System
NS = no sampling of upland COIs reported. For stormwater/wastewater, no sampling beyond permit requirements reported.
ODOT = Oregon Department Of Transportation
OERS = Oregon Emergency Response System
PAH = polycyclic aromatic hydrocarbon
PCB = polyclorinated biphenyl
PM = project manager
POTW = publicly owned treatment works
PPA = Prospective Purchaser Agreement
RI = remedial investigation
ROD = record of decision
RP = responsible party
SVOC = semivolatile organic compound
SW = stormwater
SWPCP = stormwater pollution control plan
TBT - tributyl tin
TCE = trichloroethene
TPH = total petroleum hydrocarbon
UIC = underground injection control
UST = underground storage tank
VOC = volatile organic compound
XPA = expanded preliminary assessment

Table 15. AOPC 15: Status of Adjacent or Immediatel

Site Name	Potential Contaminant Migration Pathway	SCE [b]		SCM Selection [d]			SCM Implementation and Effectiveness			
		SCD [c]	SCE Findings and Next Steps	Status of SCM Selection	SCD	Next Steps and Schedule	Status of SCM Implementation and Effectiveness	SCD	Next Steps and Schedule	Post-Construction Monitoring Results
Sources Adjacent to AOPC 15 [e]										
McCormick & Baxter	Groundwater	Complete Pathway	What were the findings of the SCE?	Complete Final ROD issued March 1998 (amended March 1996 ROD)	Contaminated soil removal, sheet-pile barrier wall, sediment cap, riparian soil cap, upland soil cap, creosote extraction	NA	All SCMs have been implemented	Periodic inspection and maintenance, effectiveness monitoring, site use restrictions	NA	NA
McCormick & Baxter	Stormwater	Complete Pathway	What were the findings of the SCE?	Complete Final ROD issued March 1998 (amended March 1996 ROD)		NA	All SCMs have been implemented		NA	NA
McCormick & Baxter	Overwater	Complete Pathway	What were the findings of the SCE?	Complete Final ROD issued March 1998 (amended March 1996 ROD)		NA	All SCMs have been implemented		NA	NA
McCormick & Baxter	Overland Transport	Complete Pathway	What were the findings of the SCE?	Complete Final ROD issued March 1998 (amended March 1996 ROD)		NA	All SCMs have been implemented		NA	NA
McCormick & Baxter	Bank Erosion	Complete Pathway	What were the findings of the SCE?	Complete Final ROD issued March 1998 (amended March 1996 ROD)		NA	All SCMs have been implemented		NA	NA
Triangle Park	Groundwater	Complete Pathway (Ader 2010)	TBD	Ongoing, Site characterization anticipated to be complete by Summer 2010; groundwater sampling TBD (Ader 2010)	TBD (EE/CA anticipated to be complete Summer 2011)	TBD	TBD	TBD	TBD	TBD

Table 15. AOPC 15: Status of Adjacent or Immediatel

Site Name	Potential Contaminant Migration Pathway	SCE [b]		SCM Selection [d]			SCM Implementation and Effectiveness			
		SCD [c]	SCE Findings and Next Steps	Status of SCM Selection	SCD	Next Steps and Schedule	Status of SCM Implementation and Effectiveness	SCD	Next Steps and Schedule	Post-Construction Monitoring Results
Triangle Park	Stormwater	Complete Pathway (Ader 2010)	Contaminated soil entrained in stormwater and sheetflow. Site soils contaminated with PCBs, dioxin, lead, PAHs and TBT above JSCS screening levels (AMEC Geometrix 2009).	Ongoing, Site characterization anticipated to be complete by Summer 2010 (Ader 2010)	TBD (EE/CA anticipated to be complete Summer 2011)	TBD	TBD	TBD	TBD	TBD
Triangle Park	Overwater Activities	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes: See last page of table for full list of footnotes.

Triangle Park	Overland Transport	Complete Pathway (Ader 2010)	Contaminated soil entrained in stormwater and sheetflow. Site soils contaminated with PCBs, dioxin, lead, PAHs and TBT above JSCS screening levels (AMEC Geometrix 2009).	TBD (EE/CA anticipated to be complete Summer 2011)	TBD	TBD	TBD	TBD	TBD	TBD

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		SCD [c]	SCE Findings and Next Steps	Status of SCM Selection	SCD	Next Steps and Schedule	Status of SCM Implementation and Effectiveness	SCD	Next Steps and Schedule	Post-Construction Monitoring Results
Triangle Park	Bank Erosion	Complete Pathway (Ader 2010)	Contaminated soil entrained in stormwater and sheetflow. Site soils contaminated with PCBs, dioxin, lead, PAHs and TBT above JSCS screening levels (AMEC Geometrix 2009).	TBD (EE/CA anticipated to be complete Summer 2011)	TBD	TBD	TBD	TBD	TBD	TBD
Triangle Park	Other - Petroleum pipeline enters at south end of site from beneath the river	Insignificant Pathway	No actions recommended	No SCMs needed	NA	NA	NA	NA	NA	NA
Shared Conveyance Systems										
OF48	Stormwater	p Insignificant Pathway	Stormwater treatment facility at end of outfall since 1996. Stormwater data indicates insignificant contaminant pathway. Continue City MS4 and watrshed SC programs. SCE to be submitted to DEQ.	TBD	TBD	TBD	TBD	TBD	TBD	TBD

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Table 15. AOPC 15: Status of Adjacent or Immediatel

Site Name	Potential Contaminant Migration Pathway	SCE [b]		SCM Selection [d]			SCM Implementation and Effectiveness			
		SCD [c]	SCE Findings and Next Steps	Status of SCM Selection	SCD	Next Steps and Schedule	Status of SCM Implementation and Effectiveness	SCD	Next Steps and Schedule	Post-Construction Monitoring Results

Notes:

[a] ~~The information contained in this table is based on info~~shared stormwater conveyance systems is from RI Table 4.4-4 and from the DEQ ECSI database. Please note that source inventory is an ongoing process by DEQ and EPA, in the form of 104(e) information requests, and thi

[b] SCE = Source Control Evaluation. This is the first step

[c] SCD = Source Control Decision. DEQ provides EPA æ Milestone Report.

[d] SCM = Source Control Measures. The final step in the

[e] Adjacent sites are those with potential sources/pathwayAOPC.

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City of Portland. 2010. Stormwater Evaluation Report,
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ECSI = Environmental Cleanup Site Inventory
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EIB = in situ bioremediation
EPA = Environmental Protection Agency
FS = feasibility study
GRH = gasoline-range hydrocarbon
GW = groundwater
JSCS = Joint Source Control Strategy
MS4 = municipal separate storm sewer systems
NA = not applicable
NAPL = non-aqueous phase liquid
NFA = no further action

Table 16. AOPC 16: Status of Adjacent or Immediately Upstream Current Ongoing and Potentially Ongoing Upland and Overwater Sources [a]

Site Name	Potential Contaminant Migration Pathway	DEQ PM	ECSI #	River Mile	AOPC	AOPC COIs	Upland and Overwater COIs	Potential Upland and Overwater Sources	DEQ Site Priority Level	DEQ Pathway Priority Level	Status of SCE
Sources Adjacent to AOPC 16 [e]											
Willbridge Bulk Fuel Facilities	Groundwater	Romero	1549	7.7W	16	**Metals** (Al, Ba, Be, Cd, Cu, Fe, Mn, Hg, Zn), **PAHs** (BAA, BAP, total low PAHs), **BnOH**, **phenol**, **total PCBs**, **total DDx**, **GRH**	VOCs, PAHs, TPH, metals	ConocoPhillips, Chevron, and Kinder Morgan bulk terminals and dock operations	High	High	Ongoing (2nd SCE for deep GW anticipated Summer 2011)
Willbridge Bulk Fuel Facilities	Stormwater						VOCs, PAHs, TPH, metals			High	Ongoing (SCE for SW anticipated to be completed for all 3 facilities in 1st qtr 2011)
Willbridge Bulk Fuel Facilities	Overwater						VOCs, PAHs, TPH, metals			Low	Ongoing (anticipated summer 2011)
Willbridge Bulk Fuel Facilities	Overland Transport						NS			None	Addressed in Stormwater SCE
Willbridge Bulk Fuel Facilities	Bank Erosion						PAHs, pesticide/herbicides, metals			Low	Assessment Report submitted February 27, 2008

Table 16. AOPC 16: Status of Adjacent or Immediately Upstream Current Ongoing and Potentially Ongoing Upland and Overwater Sources [a]

Site Name	Potential Contaminant Migration Pathway	DEQ PM	ECSI #	River Mile	AOPC	AOPC COIs	Upland and Overwater COIs	Potential Upland and Overwater Sources	DEQ Site Priority Level	DEQ Pathway Priority Level	Status of SCE
McCall Oil	Groundwater	Orr	134	7.8W	16		VOCs, SVOCs, PAHs, TPH, metals	Bulk fuel storage, marine fuel transfers, rail fuel transfers, former CCA and solvent storage, drum storage, underground pipeline corridor, catch basins, upgradient facilities (Chevron, TFA), dock operations	p Low	p Medium	Ongoing (anticipated 1st Qtr. 2011). SCE DEQ comments provided to RP.
McCall Oil	Stormwater						VOCs, SVOCs, PAHs, TPH, PCBs, metals, phthalates			p Medium	Ongoing (anticipated 1st Qtr. 2011). SCE DEQ comments provided to RP.
McCall Oil	Overwater Activities						VOCs, SVOCs, PAHs, TPH			p Medium	Ongoing (anticipated 1st Qtr. 2011). SCE DEQ comments provided to RP.
McCall Oil	Overland Transport						NA			p Low	Ongoing (anticipated 1st Qtr. 2011). SCE DEQ comments provided to RP.
McCall Oil	Bank Erosion						SVOCs, PAHs, metals			p Low	Ongoing (anticipated 1st Qtr. 2011). SCE DEQ comments provided to RP.

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Table 16. AOPC 16: Status of Adjacent or Immediately Upstream Current Ongoing and Potentially Ongoing Upland and Overwater Sources [a]

Site Name	Potential Contaminant Migration Pathway	DEQ PM	ECSI #	River Mile	AOPC	AOPC COIs	Upland and Overwater COIs	Potential Upland and Overwater Sources	DEQ Site Priority Level	DEQ Pathway Priority Level	Status of SCE
Shared Conveyance Systems											
OF22	Stormwater	Tarnow	2425	7.8W	16	**Metals** (Al, Ba, Be, Cd, Cu, Fe, Mn, Hg, Zn), **PAHs** (BAA, BAP, total low PAHs), **BnOH**, **phenol**, **total PCBs**, **total DDx**, **GRH**	Arsenic (City of Portland 2010); PAHs from groundwater infiltration (see below for Site investigations)	Drains 68 acres of heavy industrial and 2 acres of major transportation. See below for identified sources.	Medium	p Medium	p Complete (2010)
McCall Oil	Stormwater	Orr	134	7.8W	16		VOCs, SVOCs, PAHs, TPH, PCBs, metals, phthalates	Bulk fuel storage, marine fuel transfers, rail fuel transfers, former CCA and solvent storage, drum storage, underground pipeline corridor, catch basins, upgradient facilities (Paramount Petroleum, TFA), dock operations	p Low	p Medium	Ongoing (anticipated 1st Qtr. 2011). SCE DEQ comments provided to RP.
	Stormwater								High	TBD	Ongoing (anticipated Summer 2010)

Table 16. AOPC 16: Status of Adjacent or Immediately Upstream Current Ongoing and Potentially Ongoing Upland and Overwater Sources [a]

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Willbridge Bulk Fuel Facilities	Groundwater Infiltration/ City Storm Sewer[g]	Romero	1549	7.8W	16		VOCs, PAHs, TPH, metals,	Stormwater from Chevron and ConocoPhillips Terminals			Storm drain between Front Ave and River lined in 2009. Investigation on remaining segments ongoing (anticipated Fall 2011)

Notes: See last page of table for full list of footnotes.

Table 16. AOPC 16: Status of Adjacent or Immediately Upstream Current Ongoing and Potentially Ongoing Upland and Overwater Sources [a]

Site Name	Potential Contaminant Migration Pathway	DEQ PM	ECSI #	River Mile	AOPC	AOPC COIs	Upland and Overwater COIs	Potential Upland and Overwater Sources	DEQ Site Priority Level	DEQ Pathway Priority Level	Status of SCE
Chevron Asphalt Refinery	Stormwater	Pugh	1281	8W	16	**Metals** (Al, Ba, Be, Cd, Cu, Fe, Mn, Hg, Zn), **PAHs** (BAA, BAP, total low PAHs), **BnOH**, **phenol**, **total PCBs**, **total DDx**, **GRH**	VOCs, PAHs, TPH, metals	Spills and boilovers	Low	Low	Complete (7/8/10)
	Groundwater Infiltration/ City Storm Sewer[g]										Complete (7/8/10)
Sources Upstream of AOPC 16 [e]											
Front Avenue	See AOPC #18	Romero	1239								

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Table 16. AOPC 16: Status of Adjacent or Immediately Upstream Current Ongoing and Potentially Ongoing Upland and Overwater Sources [a]

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Grey shading indicates shared conveyances.

Reference Citations:

Anchor QEA. 2009. Source Control Evaluation Report, McCall Oil and Chemical Site. Anchor QEA LLC, Portland, OR. February 2009.
City of Portland. 2010. Stormwater Evaluation Report, City of Portland Outfall Project, ECSI 2425. City of Portland, OR. February 2010.
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GRH = gasoline-range hydrocarbon
GW = groundwater
JSCS = Joint Source Control Strategy
MS4 = municipal separate storm sewer systems
NA = not applicable
NAPL = non-aqueous phase liquid
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POTW = publicly owned treatment works
PPA = Prospective Purchaser Agreement
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ROD = record of decision
RP = responsible party
SVOC = semivolatile organic compound
SW = stormwater
SWPCP = stormwater pollution control plan
TBT - tributyl tin
TCE = trichloroethene
TPH = total petroleum hydrocarbon
UIC = underground injection control
UST = underground storage tank
VOC = volatile organic compound
XPA = expanded preliminary assessment

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Site Name	Potential Contaminant Migration Pathway	SCE [b]		SCM Selection [d]			SCM Implementation & Effectiveness			
		SCD [c]	SCE Findings and Next Steps	Status of SCM Selection	SCD	Next Steps and Schedule	Status of SCM Implementation & Effectiveness	SCD	Next Steps and Schedule	Post-Construction Monitoring Results
Sources Adjacent to AOPC 16 [e]										
Willbridge Bulk Fuel Facilities	Groundwater	TBD	TBD	Ongoing. Various SCMs have already been implemented prior to finalization of the SCE.	SCD not complete. Interim product recovery and hydraulic containment for shallow GW (sheet pile wall). Effectiveness monitoring ongoing.	Complete SCE	TBD	TBD	Complete SCE	TBD
Willbridge Bulk Fuel Facilities	Stormwater	TBD	TBD	Ongoing. Various SCMs have already been implemented prior to finalization of the SCE. Willbridge Bulk Fuel Facilities lined 400' of leaky City pipe (Romero).	SCD not complete. Interim measures inculding leaking stormwater conveyance system was repaired in August 2009 (OF22) to stop GW infiltration and sheen from co-mingled plume at Conoco. KM conducted repair of lined channel (Saltzman Creek).	SCE complete for Chevron. Kinder Morgan estimated 1st qtr 11', Conoco estimate 4th 10' (DEQ PM, project task schedules)	TBD	TBD	Complete SCE	TBD
Willbridge Bulk Fuel Facilities	Overwater	TBD	TBD	SCMs may not be needed	TBD	TBD	TBD	TBD	TBD	TBD
Willbridge Bulk Fuel Facilities	Overland Transport	TBD	TBD	SCMs may not be needed	NA	NA	NA	NA	NA	NA
Willbridge Bulk Fuel Facilities	Bank Erosion	TBD	TBD	SCMs may not be needed	TBD	TBD	TBD	TBD	TBD	TBD

Table 16. AOPC 16: Status of Adjacent or Immediatel

Site Name	Potential Contaminant Migration Pathway	SCE [b]		SCM Selection [d]			SCM Implementation & Effectiveness			
		SCD [c]	SCE Findings and Next Steps	Status of SCM Selection	SCD	Next Steps and Schedule	Status of SCM Implementation & Effectiveness	SCD	Next Steps and Schedule	Post-Construction Monitoring Results
McCall Oil	Groundwater	1st Quarter 2011	Data gaps to be filled in	TBD	TBD	TBD	TBD	TBD	TBD	TBD
McCall Oil	Stormwater	1st Quarter 2011	Data gaps to be filled in	TBD	TBD	TBD	TBD	TBD	TBD	TBD
McCall Oil	Overwater Activities	1st Quarter 2011	Data gaps to be filled in	TBD	TBD	TBD	TBD	TBD	TBD	TBD
McCall Oil	Overland Transport	1st Quarter 2011	Data gaps to be filled in	TBD	TBD	TBD	TBD	TBD	TBD	TBD
McCall Oil	Bank Erosion	1st Quarter 2011	Data gaps to be filled in	TBD	TBD	TBD	TBD	TBD	TBD	TBD

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Site Name	Potential Contaminant Migration Pathway	SCE [b]		SCM Selection [d]			SCM Implementation & Effectiveness			
		SCD [c]	SCE Findings and Next Steps	Status of SCM Selection	SCD	Next Steps and Schedule	Status of SCM Implementation & Effectiveness	SCD	Next Steps and Schedule	Post-Construction Monitoring Results
Shared Conveyance Systems										
OF22	Stormwater	p Complete Pathway	Most of heavy industrial portion of basin is under DEQ Cleanup program. GW infiltration into storm lines is pathway for PAHs and potentially arsenic.	Ongoing	BMP implementation through five 1200Z permits. One property implemented treatment per Stormwater Manual requirements. Source tracing complete. Lining and cleaning of City system by Sites ongoing (see below). Onsite SCMs being implemented at ECSI sites (see below)	Once sites have completed SCEs, City will prepare RI/SCM document	Continue City MS4 and watershed SC programs to improve stormwater quality	TBD	TBD	TBD
McCall Oil	Stormwater	TBD	Data gaps to be filled in	TBD	TBD	TBD	TBD	TBD	TBD	TBD
	Stormwater	TBD	Characterization started Fall 07	Ongoing	Lining of segments of storm drain completed in 2009.	Repairs or lining additional segments ongoing.	TBD	TBD	TBD	TBD

Table 16. AOPC 16: Status of Adjacent or Immediatel

Site Name	Potential Contaminant Migration Pathway	SCE [b]		SCM Selection [d]			SCM Implementation & Effectiveness			
		SCD [c]	SCE Findings and Next Steps	Status of SCM Selection	SCD	Next Steps and Schedule	Status of SCM Implementation & Effectiveness	SCD	Next Steps and Schedule	Post-Construction Monitoring Results
Willbridge Bulk Fuel Facilities	Groundwater Infiltration/ City Storm Sewer[g]									

Notes: See last page of table for full list of footnotes.

Table 16. AOPC 16: Status of Adjacent or Immediatel

Site Name	Potential Contaminant Migration Pathway	SCE [b]		SCM Selection [d]			SCM Implementation & Effectiveness			
		SCD [c]	SCE Findings and Next Steps	Status of SCM Selection	SCD	Next Steps and Schedule	Status of SCM Implementation & Effectiveness	SCD	Next Steps and Schedule	Post-Construction Monitoring Results
Chevron Asphalt Refinery		DEQ concludes that this site is not a significant ongoing source of contaminants to the Willamette River, and that source control measures implemented at the site will prevent potential future significant impacts.								
	Stormwater		Observations of sediment in City lines	Complete	DEQ concludes that this site is not a significant ongoing source of contaminants to the Willamette River, and that source control measures implemented at the site will prevent potential future significant impacts.		BMPs such as catch basin inserts, inspection and catch basin cleanout on periodic basis, storm line segments cleaned	Another SCD not anticipated	Another SCD not anticipated	Annual
	Groundwater Infiltration/ City Storm Sewer[g]	DEQ concludes that this site is not a significant ongoing source of contaminants to the Willamette River, and that source control measures implemented at the site will prevent potential future significant impacts.	Obervation of dry weather flow, generally in minimally-impacted areas	Insignificant pathway; no actions recommended	DEQ concludes that this site is not a significant ongoing source of contaminants to the Willamette River, and that source control measures implemented at the site will prevent potential future significant impacts.			Another SCD not anticipated	Another SCD not anticipated	
Sources Upstream of AOPC 16 [e]										
Front Avenue	See AOPC #18									

Notes: See last page of table for full list of footnotes.

Table 16. AOPC 16: Status of Adjacent or Immediatel

Site Name	Potential Contaminant Migration Pathway	SCE [b]		SCM Selection [d]			SCM Implementation & Effectiveness			
		SCD [c]	SCE Findings and Next Steps	Status of SCM Selection	SCD	Next Steps and Schedule	Status of SCM Implementation & Effectiveness	SCD	Next Steps and Schedule	Post-Construction Monitoring Results

Notes:

[a] ~~The information contained in this table is based on info~~shared stormwater conveyance systems is from RI Table 4.4-4 and from the DEQ ECSI database. Please note that source inventory is an ongoing process by DEQ and EPA, in the form of 104(e) information requests, and thi

[b] SCE = Source Control Evaluation. This is the first step

[c] SCD = Source Control Decision. DEQ provides EPA æ Milestone Report.

[d] SCM = Source Control Measures. The final step in the

[e] Adjacent sites are those with potential sources/pathway AOPC.

[f] This pathway is included for ECSI sites that have groun

p = DEQ's preliminary pathway determination
? = Unknown, typically due to lack of sampling informa
Italicized cells indicate upland sites within current or fo
Grey shading indicates shared conveyances.

Reference Citations:

Anchor QEA. 2009. Source Control Evaluation Report
City of Portland. 2010. Stormwater Evaluation Report,
DEQ. 2009. Portland Harbor Joint Source Control Stra

Acronyms:

AOC = Administrative Order of Consent
AOPC = area of potential concern
AS/SVE = air sparging/soil vapor extraction
AST = aboveground storage tank
BEHP = bis-2-(ethylhexyl) phthalate
BMP = best management practices
BnOH = benzyl alcohol
COI = chemical of interest
CSO = combined sewer overflow
DEQ = Oregon Department Of Environmental Quality
DNAPL = dense non-aqueous phase liquid
ECSI = Environmental Cleanup Site Inventory
EE/CA = engineering evaluation/cost analysis
EIB = in situ bioremediation
EPA = Environmental Protection Agency
FS = feasibility study
GRH = gasoline-range hydrocarbon
GW = groundwater
JSCS = Joint Source Control Strategy
MS4 = municipal separate storm sewer systems
NA = not applicable
NAPL = non-aqueous phase liquid
NFA = no further action

Table 17a. AOPC 17 - Downstream: Status of Adjacent or Immediately Upstream Current Ongoing and Potentially Ongoing Upland and Overwater Sources [a]

Site Name	Potential Contaminant Migration Pathway	DEQ PM	ECSI #	River Mile	AOPC	AOPC COIs	Upland and Overwater COIs	Potential Upland and Overwater Sources	DEQ Site Priority Level	DEQ Pathway Priority Level	Status of SCE
Sources Adjacent to AOPC 17 - Downstream [e]											
Triangle Park	Groundwater	EPA lead	277	7.5E	17D	**Metals** (As, Cd, Cu, Hg, Ag, Na, Zn), **TBT**, **total low PAHs, dibutylphthalate, BnOH, phenol, total PCBs, pesticides** (delta-HCH, dieldrin, endrine ketone)	VOCs, SVOCs, PAHs, TPH, pesticide/herbicides, PCBs, metals, phthalates, dioxin/furans, Other (e.g., asbestos)	Former lumber mills, wood processing, rail car servicing, oil and fuel storage, former concrete plant, former sludge disposal pond, former ASTs and USTs, former power plant, possible underground fuel storage vault, former chemical storage areas, oil spill	Medium	TBD	Ongoing (under federal PPA, anticipated Summer 2010)
Triangle Park	Stormwater						VOCs, SVOCs, PAHs, TPH, pesticide/herbicides, PCBs, metals, phthalates, dioxin/furans, Other (e.g., asbestos)			Medium	Ongoing (under federal PPA, anticipated Summer 2010)
Triangle Park	Overwater Activities						PAHs, TPH			None	NA

Table 17a. AOPC 17 - Downstream: Status of Adjacent or Immediately Upstream Current Ongoing and Potentially Ongoing Upland and Overwater Sources [a]

Site Name	Potential Contaminant Migration Pathway	DEQ PM	ECSI #	River Mile	AOPC	AOPC COIs	Upland and Overwater COIs	Potential Upland and Overwater Sources	DEQ Site Priority Level	DEQ Pathway Priority Level	Status of SCE
Triangle Park	Overland Transport						VOCs, SVOCs, PAHs, TPH, pesticide/herbicides, PCBs, metals, phthalates, dioxin/furans, Other (e.g., asbestos)	storage areas, oil spill		Medium	Ongoing (under federal PPA, anticipated Summer 2010)
Triangle Park	Bank Erosion						VOCs, SVOCs, PAHs, TPH, pesticide/herbicides, PCBs, metals, phthalates, dioxin/furans, Other (e.g., asbestos)			Medium	Ongoing (under federal PPA, anticipated Summer 2010)

Notes: See last page of table for full list of footnotes.

Table 17a. AOPC 17 - Downstream: Status of Adjacent or Immediately Upstream Current Ongoing and Potentially Ongoing Upland and Overwater Sources [a]

Site Name	Potential Contaminant Migration Pathway	DEQ PM	ECSI #	River Mile	AOPC	AOPC COIs	Upland and Overwater COIs	Potential Upland and Overwater Sources	DEQ Site Priority Level	DEQ Pathway Priority Level	Status of SCE
Triangle Park	Other - Petroleum pipeline enters at south end of site from beneath the river	EPA lead	277	7.5E	17D	**Metals** (As, Cd, Cu, Hg, Ag, Na, Zn), **TBT**, **total low PAHs**, **dibutylphthalate**, **BnOH**, **phenol**, **total PCBs**, **pesticides** (delta-HCH, dieldrin, endrine ketone)	TPH	Former lumber mills, wood processing, rail car servicing, oil and fuel storage, former concrete plant, former sludge disposal pond, former ASTs and USTs, former power plant, possible underground fuel storage vault, former chemical storage areas, oil spill	Medium	Low	Ongoing (under federal PPA, anticipated Summer 2010)
Sources Upstream of AOPC 17 - Downstream [e]											
Cascade General (Portland Shipyard)	See AOPC #17S	Lacey	271								

Notes:

[a] The information contained in this table is based on information obtained by LWG from correspondence with DEQ project managers and from reports in DEQ files as of ____ 2010. Information on sites upriver of RM 11 and sites within the s
EPA, in the form of 104(e) information requests, and this is not a final list of sources that may be impacting the Study Area.

[b] SCE = Source Control Evaluation. This is the first step in DEQ's source evaluation process. The status of an SCE is either complete, ongoing, not started, TBD, or NA (for a pathway that is not applicable).

[c] SCD = Source Control Decision. DEQ provides EPA and its partners an opportunity to review (but not approve or disapprove) the DEQ SCD; the status of this review is described in the column, Status of EPA Review of SCE Decision, in th

[d] SCM = Source Control Measures. The final step in the source evaluation process; the implementation status of the SCMs is either complete, ongoing, not started, TBD, or NA.

[e] Adjacent sites are those with potential sources/pathways that are immediately adjacent to the reference AOPC, and upstream sites are those potential sources/pathways that are upstream of the reference AOPC and not reference with any other

[f] This pathway is included for ECSI sites that have groundwater infiltration into the City storm sewer. For sites without this pathway, assume there is no groundwater infiltration into the City storm sewer.

p = DEQ's preliminary pathway determination
? = Unknown, typically due to lack of sampling information
Italicized cells indicate upland sites within current or former CSO basins. Non-italicized text indicates upland sites within stormwater basins.
Grey shading indicates shared conveyances.

Reference Citations:

Ader. 2010. Email of January 8, 2010 to S. Trevathan, Integral, from M. Ader, US EPA, regarding status of site characterization work at Triangle Park. U.S. Environmental Protection Agency, Seattle, WA.
AMEC Geometrix. 2009. Revised Data Gaps Work Plan. Prepared for the University of Portland, OR. AMEC Geomatrix, Inc., Seattle, WA. September 2009
DEQ. 2009. Portland Harbor Joint Source Control Strategy - Milestone Report. Prepared by the Oregon Department of Environmental Quality, Portland, OR. December 2009.

Acronyms:

AOC = Administrative Order of Consent
AOPC = area of potential concern
AS/SVE = air sparging/soil vapor extraction
AST = aboveground storage tank
BEHP = bis-2-(ethylhexyl) phthalate
BMP = best management practices
BnOH = benzyl alcohol
COI = chemical of interest
CSO = combined sewer overflow
DEQ = Oregon Department Of Environmental Quality
NPDES = National Pollutant Discharge Elimination System
NS = no sampling of upland COIs reported. For stormwater/wastewater, no sampling beyond permit requirements reported.
ODOT = Oregon Department Of Transportation
OERS = Oregon Emergency Response System
PAH = polycyclic aromatic hydrocarbon
PCB = polyclorinated biphenyl
PM = project manager
POTW = publicly owned treatment works
PPA = Prospective Purchaser Agreement
RI = remedial investigation

Table 17a. AOPC 17 - Downstream: Status of Adjacent or Immediately Upstream Current Ongoing and Potentially Ongoing Upland and Overwater Sources [a]

Site Name	Potential Contaminant Migration Pathway	DEQ PM	ECSI #	River Mile	AOPC	AOPC COIs	Upland and Overwater COIs	Potential Upland and Overwater Sources	DEQ Site Priority Level	DEQ Pathway Priority Level	Status of SCE

DNAPL = dense non-aqueous phase liquid
ECSI = Environmental Cleanup Site Inventory
EE/CA = engineering evaluation/cost analysis
EIB = in situ bioremediation
EPA = Environmental Protection Agency
FS = feasibility study
GRH = gasoline-range hydrocarbon
GW = groundwater
JSCS = Joint Source Control Strategy
MS4 = municipal separate storm sewer systems
NA = not applicable
NAPL = non-aqueous phase liquid
NFA = no further action
ROD = record of decision
RP = responsible party
SVOC = semivolatile organic compound
SW = stormwater
SWPCP = stormwater pollution control plan
TBT - tributyl tin
TCE = trichloroethene
TPH = total petroleum hydrocarbon
UIC = underground injection control
UST = underground storage tank
VOC = volatile organic compound
XPA = expanded preliminary assessment

Table 17a. AOPC 17 - Downstream: Status of Adjacen

Site Name	Potential Contaminant Migration Pathway	SCE [b]		SCM Selection [d]			SCM Implementation & Effectiveness			
		SCD [c]	SCE Findings and Next Steps	Status of SCM Selection	SCD	Next Steps and Schedule	Status of SCM Implementation & Effectiveness	SCD	Next Steps and Schedule	Post-Construction Monitoring Results
Sources Adjacent to AOPC 17 - Downstream [e]										
Triangle Park	Groundwater	Complete Pathway (Ader 2010)	TBD	Site characterization anticipated to be complete by Summer 2010; groundwater sampling TBD (Ader 2010)	TBD (EE/CA anticipated to be complete Summer 2011)	TBD	TBD	TBD	TBD	TBD
Triangle Park	Stormwater	Complete Pathway (Ader 2010)	Contaminated soil entrained in stormwater and sheetflow. Site soils contaminated with PCBs, dioxin, lead, PAHs and TBT above JSCS screening levels (AMEC Geometrix 2009)	Site characterization anticipated to be complete by Summer 2010 (Ader 2010)	TBD (EE/CA anticipated to be complete Summer 2011)	TBD	TBD	TBD	TBD	TBD
Triangle Park	Overwater Activities	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 17a. AOPC 17 - Downstream: Status of Adjacen

Site Name	Potential Contaminant Migration Pathway	SCE [b]		SCM Selection [d]			SCM Implementation & Effectiveness			
		SCD [c]	SCE Findings and Next Steps	Status of SCM Selection	SCD	Next Steps and Schedule	Status of SCM Implementation & Effectiveness	SCD	Next Steps and Schedule	Post-Construction Monitoring Results
Triangle Park	Overland Transport	Complete Pathway (Ader 2010)	Contaminated soil entrained in stormwater and sheetflow. Site soils contaminated with PCBs, dioxin, lead, PAHs and TBT above JSCS screening levels (AMEC Geometrix 2009)	TBD (EE/CA anticipated to be complete Summer 2011)	TBD	TBD	TBD	TBD	TBD	TBD
Triangle Park	Bank Erosion	Complete Pathway (Ader 2010)	Contaminated soil entrained in stormwater and sheetflow. Site soils contaminated with PCBs, dioxin, lead, PAHs and TBT above JSCS screening levels (AMEC Geometrix 2009)	TBD (EE/CA anticipated to be complete Summer 2011)	TBD	TBD	TBD	TBD	TBD	TBD

Notes: See last page of table for full list of footnotes.

Table 17a. AOPC 17 - Downstream: Status of Adjacen

Site Name	Potential Contaminant Migration Pathway	SCE [b]		SCM Selection [d]			SCM Implementation & Effectiveness			
		SCD [c]	SCE Findings and Next Steps	Status of SCM Selection	SCD	Next Steps and Schedule	Status of SCM Implementation & Effectiveness	SCD	Next Steps and Schedule	Post-Construction Monitoring Results
Triangle Park	Other - Petroleum pipeline enters at south end of site from beneath the river	Insignificant Pathway	No actions recommended	No SCMs needed	NA	NA	NA	NA	NA	NA
Sources Upstream of AOPC 17 - Downstream [e]										
Cascade General (Portland Shipyard)	See AOPC #17S									

Notes:

[a] The information contained in this table is based on info shared stormwater conveyance systems is from RI Table 4.4-4 and from the DEQ ECSI database. Please note that source inventory is an ongoing process by DEQ and EPA, in the form of 104(e) information requests, and thi

[b] SCE = Source Control Evaluation. This is the first step

[c] SCD = Source Control Decision. DEQ provides EPA æ Milestone Report.

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AST = aboveground storage tank
BEHP = bis-2-(ethylhexyl) phthalate
BMP = best management practices
BnOH = benzyl alcohol
COI = chemical of interest
CSO = combined sewer overflow
DEQ = Oregon Department Of Environmental Quality

Table 17a. AOPC 17 - Downstream: Status of Adjacen

Site Name	Potential Contaminant Migration Pathway	SCE [b]		SCM Selection [d]			SCM Implementation & Effectiveness			
		SCD [c]	SCE Findings and Next Steps	Status of SCM Selection	SCD	Next Steps and Schedule	Status of SCM Implementation & Effectiveness	SCD	Next Steps and Schedule	Post-Construction Monitoring Results

DNAPL = dense non-aqueous phase liquid
ECSI = Environmental Cleanup Site Inventory
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EIB = in situ bioremediation
EPA = Environmental Protection Agency
FS = feasibility study
GRH = gasoline-range hydrocarbon
GW = groundwater
JSCS = Joint Source Control Strategy
MS4 = municipal separate storm sewer systems
NA = not applicable
NAPL = non-aqueous phase liquid
NFA = no further action

Table 17b. AOPC 17 - Slip: Status of Adjacent or Immediately Upstream Current Ongoing and Potentially Ongoing Upland and Overwater Sources [a]

Site Name	Potential Contaminant Migration Pathway	DEQ PM	ECSI #	River Mile	AOPC	AOPC COIs	Upland and Overwater COIs	Potential Upland and Overwater Sources	DEQ Site Priority Level	DEQ Pathway Priority Level	Status of SCE
Sources Adjacent to AOPC 17 - Slip [e]											
Cascade General (Portland Shipyard)	Groundwater - Operable Unit 1	Lacey	271	8.4E	17S	**Metals** (As, Cd, Cu, Hg, Ag, Zn), **TBT, total low PAHs, dibutylphthalate, BnOH, phenol, total PCBs, pesticides** (delta-HCH, dieldrin, endrin ketone)	Metals, VOCs, and PAHs	Current shipyard operations	p Medium	p Low	Ongoing (anticipated 3rd Qtr 2010)
Cascade General (Portland Shipyard) OU1 not owned by Port and these pathways are not the responsibility of Port	Stormwater - Operable Unit 1						VOCs, PAHs, TPH, PCBs, metals, butyltins, phthalates			p Medium	Completed (2nd Qtr 2010)
Cascade General (Portland Shipyard) OU1 not owned by Port and these pathways are not the responsibility of Port	Overwater - Operable Unit 1						PAHs, TPH, metals, butyltins, phthalates			None	NA
Cascade General (Portland Shipyard) OU1 not owned by Port and these pathways are not the responsibility of Port	Overland Transport - Operable Unit 1						NS			p Low	Completed (2nd Qtr 2010)
Cascade General (Portland Shipyard)	Bank Erosion - Operable Unit 1						PCBs, butyltins			p Medium	Ongoing (anticipated 3rd Qtr 2010)
Fred Devine	Groundwater	Tarnow	2365	8.3E	17S		NS	Maintenance operations, former USTs, ASTs, PGE transformers, catch basins, overwater spills, vessel emisions, storage area NE of warehouse	p Low	None	NA
Fred Devine	Stormwater						SVOCs, PAHs, TPH, metals, phthalates			p Low	Ongoing (anticipated 4th Qtr. 2010)
Fred Devine	Overwater Activities						TPH			None	NA
Fred Devine	Overland Transport						TPH, metals, butyltins, phthalates			None	NA
Fred Devine	Bank Erosion						NS			None	NA
U.S. Coast Guard - Marine Safety Station	Groundwater						None			p Low	NA

Table 17b. AOPC 17 - Slip: Status of Adjacent or Immediately Upstream Current Ongoing and Potentially Ongoing Upland and Overwater Sources [a]

Site Name	Potential Contaminant Migration Pathway	DEQ PM	ECSI #	River Mile	AOPC	AOPC COIs	Upland and Overwater COIs	Potential Upland and Overwater Sources	DEQ Site Priority Level	DEQ Pathway Priority Level	Status of SCE
U.S. Coast Guard - Marine Safety Station	Stormwater	Rapp	1338	8.2E	17S		PAHs, metals	Dock and overwater maintenance operations, fuel storage and buried product lines, garage, buoy storage yard, former drum storage area, Mt. Jefferson building, catch basins	p Medium	p Medium	Ongoing (anticipated 2nd Q 2011)
U.S. Coast Guard - Marine Safety Station	Overwater Activities						VOCs, SVOCs, PAHs, TPH, metals			Low	Ongoing (anticipated 2nd Q 2011)
U.S. Coast Guard - Marine Safety Station	Overland Transport						NS			p Low	Ongoing (anticipated 2nd Q 2010)
U.S. Coast Guard - Marine Safety Station	Bank Erosion						NS			p Low	Ongoing (anticipated 2nd Q 2010)

Notes: See last page of table for full list of footnotes.

Table 17b. AOPC 17 - Slip: Status of Adjacent or Immediately Upstream Current Ongoing and Potentially Ongoing Upland and Overwater Sources [a]

Site Name	Potential Contaminant Migration Pathway	DEQ PM	ECSI #	River Mile	AOPC	AOPC COIs	Upland and Overwater COIs	Potential Upland and Overwater Sources	DEQ Site Priority Level	DEQ Pathway Priority Level	Status of SCE
Shared Conveyance Systems											
OFM-1	Stormwater	Tarnow	2425	8.5E	17S	**Metals** (As, Cd, Cu, Hg, Ag, Zn), **TBT**, **total low PAHs**, **dibutylphthalate**, **BnOH**, **phenol**, **total PCBs**, **pesticides** (delta-HCH, dieldrin, endrin ketone)	PCBs (City of Portland 2010b)	Drains 162 acres of light industry zoning (some heavy industry land use). See below for identified sources.	Medium	p Medium	p Complete (City of Portland 2003)
Fred Devine	Stormwater	Tarnow	2365	8.3E	17S		SVOCs, PAHs, TPH, metals, phthalates	Maintenance operations, former USTs, ASTs, PGE transformers, catch basins, overwater spills, vessel emisions, storage area NE of warehouse	p Low	p Low	Ongoing (anticipated 4th Qtr. 2010)
Freightliner TMP	Stormwater	Romero	2366	8.3E	17S		PAHs, PCBs, metals, phthalates	Truck manufacturing; the facility also consists of a wastewater treatment plant which discharges to sanitry sewer, maintenance building for servicing equipment and forklifts, hazardous waste covered storage area, and a tank farm. Former USTs, former wheel paint booth	p Medium	TBD	Ongoing (anticipated 4th Qtr. 2010)
Roadway Express	Stormwater	Kirk	3807	8.6E	17S		TPH	Historical spills and materials handling in uncovered areas			
US Navy and Marine Reserve Center	Stormwater	Orr	5109	8.1E	17S		None reported	Former UST near riverbank			

Table 17b. AOPC 17 - Slip: Status of Adjacent or Immediately Upstream Current Ongoing and Potentially Ongoing Upland and Overwater Sources [a]

Site Name	Potential Contaminant Migration Pathway	DEQ PM	ECSI #	River Mile	AOPC	AOPC COIs	Upland and Overwater COIs	Potential Upland and Overwater Sources	DEQ Site Priority Level	DEQ Pathway Priority Level	Status of SCE
OFM-2	Stormwater	Tarnow	2425	8.9E	17S		None (City of Portland 2010b)	Drains 127 acres of light industry	Low	p Low	p Complete (2010)

Notes: See last page of table for full list of footnotes.

GI Trucking	Stormwater	Wistar	1840	9E	17S		None reported	Diesel and bunker oil soil contamination			

Table 17b. AOPC 17 - Slip: Status of Adjacent or Immediately Upstream Current Ongoing and Potentially Ongoing Upland and Overwater Sources [a]

Site Name	Potential Contaminant Migration Pathway	DEQ PM	ECSI #	River Mile	AOPC	AOPC COIs	Upland and Overwater COIs	Potential Upland and Overwater Sources	DEQ Site Priority Level	DEQ Pathway Priority Level	Status of SCE
OFM-3	Stormwater	Tarnow	2425	9.2E	17S	**Metals** (As, Cd, Cu, Hg, Ag, Zn), **TBT**, **total low PAHs**, **dibutylphthalate**, **BnOH**, **phenol**, **total PCBs**, **pesticides** (delta-HCH, dieldrin, endrin ketone)	None (City of Portland 2010b)	Drains 111 acres of light industry	Low	p Low	p Complete (2010)
Freightliner Parts Plant	Stormwater	Romero	115	9.2E	17S		Metals	Former UST, former wet filter paint booths, stormwater discharges	p Low	TBD	Ongoing (anticipated 4th Qtr. 2010)
Fred Meyer - Swan Island	Stormwater	Unassigned	44	9.5E	17S		None	Historical dismantling of oil-filled transformers and other electrical equipment, and past operating practices at copper wire reclaiming operations			
OFS-1	Stormwater	Tarnow	2425	8.5E	17S		Total PAHs, copper (City of Portland 2010b)	Drains 21 acres of heavy industry and 4 acres of light industry. See below for identified sources.	Medium	p Medium	p Complete (2010)

Table 17b. AOPC 17 - Slip: Status of Adjacent or Immediately Upstream Current Ongoing and Potentially Ongoing Upland and Overwater Sources [a]

Site Name	Potential Contaminant Migration Pathway	DEQ PM	ECSI #	River Mile	AOPC	AOPC COIs	Upland and Overwater COIs	Potential Upland and Overwater Sources	DEQ Site Priority Level	DEQ Pathway Priority Level	Status of SCE
Cascade General (Portland Shipyard) OU1 not owned by Port and these pathways are not the responsibility of Port	Stormwater - Operable Unit 1	Lacey	271	8.4E	17S						

Notes: See last page of table for full list of footnotes.

OFS-2	Stormwater	Tarnow	2425	9.1E	17S	**Metals** (As, Cd, Cu, Hg, Ag, Zn), **TBT**, **total low PAHs**, **dibutylphthalate**, **BnOH**, **phenol**, **total PCBs**, **pesticides** (delta-HCH, dieldrin, endrin ketone)	None (City of Portland 2010b)	Drains 23 acres of light industry and 4 acres of heavy industry	Low	p Low	p Complete (2010)
Cascade General (Portland Shipyard) and Operable Unit-3 OU1 not owned by Port and these pathways are not the responsibility of Port	Stormwater - Cascade General and Portland Shipyard OU-3	Lacey	271	8.4E	17S						
Auto Vending	Stormwater	Unassigned	1430	9.2E	17S		None	Leaking USTs and contaminated fill material			
Crosby & Overton	Stormwater	Unassigned	877	8.9E	17S		PCBs	Possible use of PCB-contaminated oil as dust suppressant			
Upstream Shared Conveyance Systems											
OFS-6	Stormwater	Tarnow	2425	8.5E	17S	**Metals** (As, Cd, Cu, Hg, Ag, Zn), **TBT**, **total low PAHs**, **dibutylphthalate**, **BnOH**, **phenol**, **total PCBs**, **pesticides** (delta-HCH, dieldrin, endrin	Copper, zinc (City of Portland 2010)	Drains 19 acres of heavy industry and 4 acres of light industry. See below for identified sources	Medium	p Medium	p Complete (City of Portland 2008)

Table 17b. AOPC 17 - Slip: Status of Adjacent or Immediately Upstream Current Ongoing and Potentially Ongoing Upland and Overwater Sources [a]

Site Name	Potential Contaminant Migration Pathway	DEQ PM	ECSI #	River Mile	AOPC	AOPC COIs	Upland and Overwater COIs	Potential Upland and Overwater Sources	DEQ Site Priority Level	DEQ Pathway Priority Level	Status of SCE
Cascade General (Portland Shipyard) OU1 not owned by Port and these pathways are not the responsibility of Port	Stormwater - Operable Unit 1	Lacey	271	8.4E	17S	ketone)					

Notes: See last page of table for full list of footnotes.

Table 17b. AOPC 17 - Slip: Status of Adjacent or Immediately Upstream Current Ongoing and Potentially Ongoing Upland and Overwater Sources [a]

Site Name	Potential Contaminant Migration Pathway	DEQ PM	ECSI #	River Mile	AOPC	AOPC COIs	Upland and Overwater COIs	Potential Upland and Overwater Sources	DEQ Site Priority Level	DEQ Pathway Priority Level	Status of SCE

Notes:

[a] The information contained in this table is based on information obtained by LWG from correspondence with DEQ project managers and from reports in DEQ files as of ____ 2010. Information on sites upriver of RM 11 and sites within the s
in the form of 104(e) information requests, and this is not a final list of sources that may be impacting the Study Area.

[b] SCE = Source Control Evaluation. This is the first step in DEQ's source evaluation process. The status of an SCE is either complete, ongoing, not started, TBD, or NA (for a pathway that is not applicable).

[c] SCD = Source Control Decision. DEQ provides EPA and its partners an opportunity to review (but not approve or disapprove) the DEQ SCD; the status of this review is described in the column, Status of EPA Review of SCE Decision, in th

[d] SCM = Source Control Measures. The final step in the source evaluation process; the implementation status of the SCMs is either complete, ongoing, not started, TBD, or NA.

[e] Adjacent sites are those with potential sources/pathways that are immediately adjacent to the reference AOPC, and upstream sites are those potential sources/pathways that are upstream of the reference AOPC and not reference with any other

[f] This pathway is included for ECSI sites that have groundwater infiltration into the City storm sewer. For sites without this pathway, assume there is no groundwater infiltration into the City storm sewer.

p = DEQ's preliminary pathway determination
? = Unknown, typically due to lack of sampling information
Italicized cells indicate upland sites within current or former CSO basins. Non-italicized text indicates upland sites within stormwater basins.
Grey shading indicates shared conveyances.

Reference Citations:

City of Portland. 2003. Phase 1 Data Evaluation Report and Phase 2 Work Planning for City of Portland Outfall M-1. City of Portland, OR April 2003.
City of Portland. 2006. City Outfall Basin M-1 Dry-Weather Flow Sampling. City of Portland, OR. April 2006.
City of Portland. 2008. City Outfall Basin S-6 Inline Solids Sampling. City of Portland, OR. January 2008.
City of Portland. 2010a. Outfall Basin M-1 Inline Solids Investigation. City of Portland, OR. January 2010.
City of Portland. 2010b. Stormwater Evaluation Report, City of Portland Outfall Project, ECSI 2425. City of Portland, OR. February 2010.
DEQ. 2009. Portland Harbor Joint Source Control Strategy - Milestone Report. Prepared by the Oregon Department of Environmental Quality, Portland, OR. December 2009.
TEC. 2009. United States Coast Guard Marine Safety Station, Portland, Oregon, Stormwater and Sediment Sampling Event. TEC Inc., Seattle, WA. February 2009.

Acronyms:

AOC = Administrative Order of Consent
AOPC = area of potential concern
AS/SVE = air sparging/soil vapor extraction
AST = aboveground storage tank
BEHP = bis-2-(ethylhexyl) phthalate
BMP = best management practices
BnOH = benzyl alcohol
COI = chemical of interest
CSO = combined sewer overflow
DEQ = Oregon Department Of Environmental Quality
DNAPL = dense non-aqueous phase liquid
ECSI = Environmental Cleanup Site Inventory
EE/CA = engineering evaluation/cost analysis
EIB = in situ bioremediation
EPA = Environmental Protection Agency
FS = feasibility study
GRH = gasoline-range hydrocarbon
GW = groundwater
JSCS = Joint Source Control Strategy
MS4 = municipal separate storm sewer systems
NA = not applicable
NAPL = non-aqueous phase liquid
NPDES = National Pollutant Discharge Elimination System
NS = no sampling of upland COIs reported. For stormwater/wastewater, no sampling beyond permit requirements reported.
ODOT = Oregon Department Of Transportation
OERS = Oregon Emergency Response System
PAH = polycyclic aromatic hydrocarbon
PCB = polyclorinated biphenyl
PM = project manager
POTW = publicly owned treatment works
PPA = Prospective Purchaser Agreement
RI = remedial investigation
ROD = record of decision
RP = responsible party
SVOC = semivolatile organic compound
SW = stormwater
SWPCP = stormwater pollution control plan
TBT - tributyl tin
TCE = trichloroethene
TPH = total petroleum hydrocarbon
UIC = underground injection control
UST = underground storage tank
VOC = volatile organic compound
XPA = expanded preliminary assessment

Table 17b. AOPC 17 - Slip: Status of Adjacent or Immediately Upstream Current Ongoing and Potentially Ongoing Upland and Overwater Sources [a]

Site Name	Potential Contaminant Migration Pathway	DEQ PM	ECSI #	River Mile	AOPC	AOPC COIs	Upland and Overwater COIs	Potential Upland and Overwater Sources	DEQ Site Priority Level	DEQ Pathway Priority Level	Status of SCE

NFA = no further action

SCE [b]		SCM Selection [d]			SCM Implementation and Effectiveness			
SCD [c]	SCE Findings and Next Steps	Status of SCM Selection	SCD	Next Steps and Schedule	Status of SCM Implementation and Effectiveness	SCD	Next Steps and Schedule	Post-Construction Monitoring Results
TBD	TBD (waiting on SCE to be completed)	TBD	TBD	TBD	TBD	TBD	TBD	TBD
TBD	TBD (waiting on SCE to be completed)	TBD	TBD	TBD	TBD	TBD	TBD	TBD
Dry dock and wharf ship maintenance (spills will be reported to OERS)	NA	NA	NA	NA	NA	NA	NA	NA
TBD	TBD (waiting on SCE to be completed)	TBD	TBD	TBD	TBD	TBD	TBD	TBD
TBD	TBD (waiting on SCE to be completed)	TBD	TBD	TBD	TBD	TBD	TBD	TBD
No known or current sources	NA	NA	NA	NA	NA	NA	NA	NA
TBD	Waiting on SCE to be completed; complete stormwater characterization	BMPs such as catch basin inserts, inspection and catch basin cleanout on periodic basis	TBD	TBD	TBD	TBD	TBD	TBD
No known or current sources	NA	NA	NA	NA	NA	NA	NA	NA
No known or current sources	NA	NA	NA	NA	NA	NA	NA	NA
No known or current sources	NA	NA	NA	NA	NA	NA	NA	NA
Insignificant Pathway	No actions recommended, no SCMs needed	NA	NA	NA	NA	NA	NA	NA

SCE [b]		SCM Selection [d]			SCM Implementation and Effectiveness			
SCD [c]	SCE Findings and Next Steps	Status of SCM Selection	SCD	Next Steps and Schedule	Status of SCM Implementation and Effectiveness	SCD	Next Steps and Schedule	Post-Construction Monitoring Results
TBD	Waiting on SCE to be completed; sampling stormwater system	TBD	TBD	TBD	TBD	TBD	TBD	TBD
No known current sources (spills will be reported to OERS)	NA	NA	NA	NA	NA	NA	NA	NA
Insignificant Pathway	No actions recommended, no SCMs needed	NA	NA	NA	NA	NA	NA	NA
Insignificant Pathway	No actions recommended, no SCMs needed	NA	NA	NA	NA	NA	NA	NA

SCE [b]		SCM Selection [d]			SCM Implementation and Effectiveness			
SCD [c]	SCE Findings and Next Steps	Status of SCM Selection	SCD	Next Steps and Schedule	Status of SCM Implementation and Effectiveness	SCD	Next Steps and Schedule	Post-Construction Monitoring Results
p Complete Pathway	Source of PCBs identified (City of Portland 2010a). Dry weather flow from one site found to have elevated metals (City of Portland 2006). See below for additional Site findings.	p Complete	Source tracing complete. BMP implementation through six 1200Z permits. Five properties implemented treatment per Stormwater Manual requirements. Onsite SCMs being implemented at ECSI sites (see below).	Once sites have completed SCEs, City will prepare RI/SCM document	Continue MS4 and watershed programs to improve stormwater quality	TBD	TBD	TBD
TBD	Waiting on SCE to be completed; complete stormwater characterization	BMPs such as catch basin inserts, inspection and catch basin cleanout on periodic basis	TBD	TBD	TBD	TBD	TBD	TBD
TBD	SW evaluation started 2007	TBD	RP voluntarily applying SW engineering controls on Ensign Street Outfall; coating metal roof; stormwater system sediment cleanout 2006–2007 simultaneous with screening	TBD	TBD	TBD	TBD	TBD
Not tracked in Milestone Report. Contaminated soil removed and backfilled with clean soil. NFA (2010)								
Not tracked in Milestone Report [Additional information requested]								

SCE [b]		SCM Selection [d]			SCM Implementation and Effectiveness			
SCD [c]	SCE Findings and Next Steps	Status of SCM Selection	SCD	Next Steps and Schedule	Status of SCM Implementation and Effectiveness	SCD	Next Steps and Schedule	Post-Construction Monitoring Results
TBD due to location in lagoon	BMP implementation through three 1200Z permits. Four properties implemented treatment per Stormwater Manual requirements. Stormwater data indicates insignificant contaminant pathway. Continue City MS4 and watershed SC programs. SCE to be submitted to DEQ.	TBD	TBD	TBD	TBD	TBD	TBD	TBD

Not tracked in Milestone Report. Contaminated soil excavated down to 10 feet and removed from site in 1993.

SCE [b]		SCM Selection [d]			SCM Implementation and Effectiveness			
SCD [c]	**SCE Findings and Next Steps**	**Status of SCM Selection**	**SCD**	**Next Steps and Schedule**	**Status of SCM Implementation and Effectiveness**	**SCD**	**Next Steps and Schedule**	**Post-Construction Monitoring Results**
TBD due to location in lagoon	BMP implementation through three 1200Z permits. Two sites implemented treatment per Stormwater Manual requirements. Stormwater data indicates insignificant contaminant pathway. Continue City MS4 and watershed SC programs. SCE to be submitted to DEQ.	TBD	TBD	TBD	TBD	TBD	TBD	TBD
TBD	Additional stormwater sampling needed	TBD	RP voluntary cleanout of stormwater system prior to completing screening	TBD	TBD	TBD	TBD	TBD
Not tracked in Milestone Report. Soil contamination currently capped under asphalt. NFA (1992)								
p Complete Pathway	Sources of PAHs and metals identified (see below)	Ongoing	BMP implementation through two 1200Z permits. Onsite SCMs being implemented at ECSI sites (see below).	Once sites have completed SCEs, City will prepare RI/SCM document	Continue City MS4 and watershed SC programs to improve stormwater quality	TBD	TBD	TBD

SCE [b]		SCM Selection [d]			SCM Implementation and Effectiveness			
SCD [c]	SCE Findings and Next Steps	Status of SCM Selection	SCD	Next Steps and Schedule	Status of SCM Implementation and Effectiveness	SCD	Next Steps and Schedule	Post-Construction Monitoring Results
TBD due to location in lagoon	One site implemented treatment per Stormwater Manual requirements. Continue City MS4 and watershed SC programs. Stormwater data indicates insignificant contaminant pathway. SCE to be submitted to DEQ.	TBD	TBD	TBD	TBD	TBD	TBD	TBD
tracked in MK ; Site currently covered with pavement and building; no stormwater exposure to subsurface contamination. [additional information requested] No additional info available								
Site being evaulated under Portland Shipyard Operable Unit 3 (ECSI #271)								
p Complete Pathway	Inline solids confirms current ECSI site as metals source (City of Portland 2008).	Ongoing	BMP implementation through two 1200Z permits. Onsite SCMs being implemented at ECSI sites (see below).	Once sites have completed SCEs, City will prepare RI/SCM document	Continue City MS4 and watershed SC programs to improve stormwater quality	TBD	TBD	TBD

SCE [b]		SCM Selection [d]			SCM Implementation and Effectiveness			
SCD [c]	SCE Findings and Next Steps	Status of SCM Selection	SCD	Next Steps and Schedule	Status of SCM Implementation and Effectiveness	SCD	Next Steps and Schedule	Post-Construction Monitoring Results

SCE [b]		SCM Selection [d]			SCM Implementation and Effectiveness			
SCD [c]	SCE Findings and Next Steps	Status of SCM Selection	SCD	Next Steps and Schedule	Status of SCM Implementation and Effectiveness	SCD	Next Steps and Schedule	Post-Construction Monitoring Results

;hared stormwater conveyance systems is from RI Table 4.4-4 and from the DEQ ECSI database. Please note that source inventory is an ongoing process by DEQ and EPA,

e Milestone Report.

AOPC.

SCE [b]		SCM Selection [d]			SCM Implementation and Effectiveness			
SCD [c]	SCE Findings and Next Steps	Status of SCM Selection	SCD	Next Steps and Schedule	Status of SCM Implementation and Effectiveness	SCD	Next Steps and Schedule	Post-Construction Monitoring Results

Table 18. AOPC 18: Status of Adjacent or Immediately Upstream Current Ongoing and Potentially Ongoing Upland and Overwater Sources [a]

Site Name	Potential Contaminant Migration Pathway	DEQ PM	ECSI #	River Mile	AOPC	AOPC COIs	Upland and Overwater COIs	Potential Upland and Overwater Sources	DEQ Site Priority Level	DEQ Pathway Priority Level	Status of SCE
Sources Adjacent to AOPC 18 [e]											
McCall Oil	Groundwater	Orr	134	7.8W	18	**Metals** (Al, Ba, Cd, Cu, Fe, Mn, Hg, Ag, Zn), **total low PAHs**, **BnOH, total PCBs**, **pesticides** (delta-HCH, dieldrin, endrin), **chloroethane**	VOCs, SVOCs, PAHs, TPH, metals	Bulk fuel storage, marine fuel transfers, rail fuel transfers, former CCA and solvent storage, drum storage, underground pipeline corridor, catch basins, upgradient facilities (Paramount Petroleum, TFA), dock operations	p Medium	p Medium	Ongoing (anticipated 1st Qtr. 2011). SCE DEQ comments provided to RP.
McCall Oil	Stormwater						VOCs, SVOCs, PAHs, TPH, PCBs, metals, phthalates			p Medium	Ongoing (anticipated 1st Qtr. 2011). SCE DEQ comments provided to RP.
McCall Oil	Overwater Activities						VOCs, SVOCs, PAHs, TPH			None	Ongoing (anticipated 1st Qtr. 2011). SCE DEQ comments provided to RP.
McCall Oil	Overland Transport						NA			p Low	Ongoing (anticipated 1st Qtr. 2011). SCE DEQ comments provided to RP.
McCall Oil	Bank Erosion						SVOCs, PAHs, metals			p Low	Ongoing (anticipated 1st Qtr. 2011). SCE DEQ comments provided to RP.
Front Avenue LP Properties (CMI NW, Hampton, Lonestar/Glacier NW)	Groundwater	Romero	1239	8.2W	18		VOCs, SVOCs, PAHs, TPH, PCBs, metals	Slag fill material, Parcels 1, 2, and 3 former and current operations, caustic-lube oil and graphic lube oil discharges to storm drain, overwater activities	p Low	p Low	Ongoing (anticipated 2nd Qtr. 2010)
Front Avenue LP Properties (CMI NW, Hampton, Lonestar/Glacier NW)	Stormwater						VOCs, SVOCs, PAHs, TPH, PCBs, metals, phthalates			TBD	Ongoing (anticipated 2nd Qtr. 2011)
Front Avenue LP Properties (CMI NW, Hampton, Lonestar/Glacier NW)	Overwater Activities						TPH			None	NA
Front Avenue LP Properties (CMI NW, Hampton, Lonestar/Glacier NW)	Overland Transport						VOCs, SVOCs, PAHs, TPH, metals			None	NA

Table 18. AOPC 18: Status of Adjacent or Immediately Upstream Current Ongoing and Potentially Ongoing Upland and Overwater Sources [a]

Site Name	Potential Contaminant Migration Pathway	DEQ PM	ECSI #	River Mile	AOPC	AOPC COIs	Upland and Overwater COIs	Potential Upland and Overwater Sources	DEQ Site Priority Level	DEQ Pathway Priority Level	Status of SCE
Front Avenue LP Properties (CMI NW, Hampton, Lonestar/Glacier NW)	Bank Erosion						Metals			p Low	Ongoing (anticipated 2nd Qtr. 2010)
Shaver Transportation	Groundwater	Pugh	2377	8.4W	18		None reported	Diesel fuel AST, former diesel fuel USTs, storage building, overwater activities	NFA, Low	Low	Complete (6/7/2003 NFA Issued)
Shaver Transportation	Stormwater	Pugh	2377	8.4W	18		None reported	Diesel fuel AST, former diesel fuel USTs, storage building, overwater activities	NFA, Low	Low	Complete (6/7/2003 NFA Issued)
Shaver Transportation	Overwater Activities						TPH			Low	Complete (6/7/2003 NFA Issued)
Shaver Transportation	Overland Transport						None reported			Low	Complete (6/7/2003 NFA Issued)

Notes: See last page of table for full list of footnotes.

Table 18. AOPC 18: Status of Adjacent or Immediately Upstream Current Ongoing and Potentially Ongoing Upland and Overwater Sources [a]

Site Name	Potential Contaminant Migration Pathway	DEQ PM	ECSI #	River Mile	AOPC	AOPC COIs	Upland and Overwater COIs	Potential Upland and Overwater Sources	DEQ Site Priority Level	DEQ Pathway Priority Level	Status of SCE
Shaver Transportation	Bank Erosion	Pugh	2377	8.4W	18	**Metals** (Al, Ba, Cd, Cu, Fe, Mn, Hg, Ag, Zn), **total low PAHs, BnOH, total PCBs, pesticides** (delta-HCH, dieldrin, endrin), **chloroethane**	None reported	Diesel fuel AST, former diesel fuel USTs, storage building, overwater activities	NFA, Low	Low	Complete (6/7/2003 NFA Issued)
Lakeside Industries	Groundwater	Orr	2372	8.4W	18		VOCs	Former dry wells, Gunderson VOC groundwater plume, dock operations	p Low	p Low	Unknown Pending Negotiations with Gunderson
Lakeside Industries	Stormwater						NS			TBD	Unknown Pending Negotiations with Gunderson
Lakeside Industries	Overwater Activities						NS			None	Unknown Pending Negotiations with Gunderson
Lakeside Industries	Overland Transport						NS			None	Unknown Pending
Lakeside Industries	Bank Erosion						NS			p Low	Unknown Pending Negotiations with Gunderson
Shared Conveyance Systems											
OF19A	Stormwater	Tarnow	2425	8.3W	18		TBD	Drains <2 acres of NW Front Ave; no ECSI sites connect to this basin	Low	p Low	Ongoing (expected 3rd Qtr. 2010)

Table 18. AOPC 18: Status of Adjacent or Immediately Upstream Current Ongoing and Potentially Ongoing Upland and Overwater Sources [a]

Site Name	Potential Contaminant Migration Pathway	DEQ PM	ECSI #	River Mile	AOPC	AOPC COIs	Upland and Overwater COIs	Potential Upland and Overwater Sources	DEQ Site Priority Level	DEQ Pathway Priority Level	Status of SCE
OF19	Stormwater	Tarnow	2425	8.3W	18	**Metals** (Al, Ba, Cd, Cu, Fe, Mn, Hg, Ag, Zn), **total low PAHs**, **BnOH**, **total PCBs**, **pesticides** (delta-HCH, dieldrin, endrin), **chloroethane**	PCBs, 4',4-DDD, aldrin, heptachlor, total chlordanes (City of Portland 2010b)	Drains 137 acres of heavy industry and 9 acres of major transportation See below for identified sources.	Medium	p Medium	p Complete (2010)

Notes: See last page of table for full list of footnotes.

Table 18. AOPC 18: Status of Adjacent or Immediately Upstream Current Ongoing and Potentially Ongoing Upland and Overwater Sources [a]

Site Name	Potential Contaminant Migration Pathway	DEQ PM	ECSI #	River Mile	AOPC	AOPC COIs	Upland and Overwater COIs	Potential Upland and Overwater Sources	DEQ Site Priority Level	DEQ Pathway Priority Level	Status of SCE
Greenway Recycling	Stormwater	Orr	4655	8.4W	18	**Metals** (Al, Ba, Cd, Cu, Fe, Mn, Hg, Ag, Zn), **total low PAHs**, **BnOH**, **total PCBs**, **pesticides** (delta-HCH, dieldrin, endrin), **chloroethane**	None	Site redevelopment completed in 2007, including stormwater treatment. Current use is yard debris recycling. Site entered ICP in 2007.	Low	Low	Complete (2007)
PGE - Forest Park	Stormwater	Tarnow	2406	8.5W	18		None	Site remediated in 2000 and site currently disconnected from the City storm system. Site will be redeveloped as Forest Park Trail Head when funding becomes available.	Low	Low	Complete (1999)
Calbag Metals	Stormwater	Gainer	2454	8.5W	18		PCBs, metals, phthalates	Site currently used by sewer cleaning company and metal fabricator. Former metal recycling operations, incinerator ash.	Medium	Medium	Complete (2001); re-opened (2010)
Conoco - Willbridge	Stormwater	Unassigned	177	7.5W	18		VOCs, TPH, metals	Petroleum spills and tank overfills, groundwater contamination. About 7 acres discharges to Outfall 19.			

Table 18. AOPC 18: Status of Adjacent or Immediately Upstream Current Ongoing and Potentially Ongoing Upland and Overwater Sources [a]

Site Name	Potential Contaminant Migration Pathway	DEQ PM	ECSI #	River Mile	AOPC	AOPC COIs	Upland and Overwater COIs	Potential Upland and Overwater Sources	DEQ Site Priority Level	DEQ Pathway Priority Level	Status of SCE

Notes: See last page of table for full list of footnotes.

Table 18. AOPC 18: Status of Adjacent or Immediately Upstream Current Ongoing and Potentially Ongoing Upland and Overwater Sources [a]

Site Name	Potential Contaminant Migration Pathway	DEQ PM	ECSI #	River Mile	AOPC	AOPC COIs	Upland and Overwater COIs	Potential Upland and Overwater Sources	DEQ Site Priority Level	DEQ Pathway Priority Level	Status of SCE
Chevron Asphalt Refinery	Stormwater	Pugh	1281	8W	18	**Metals** (Al, Ba, Cd, Cu, Fe, Mn, Hg, Ag, Zn), **total low PAHs**, **BnOH**, **total PCBs**, **pesticides** (delta-HCH, dieldrin, endrin), **chloroethane**	~~VOCs~~, PAHs, TPH, metals	Spills and boilovers	Low	Low	Complete (7/8/10)
	Groundwater Infiltration/ City Storm Sewer[g]										Complete (7/8/10)
Front Avenue LP Properties (CMI NW, Hampton, Lonestar/Glacier NW - Tube Forgings is only facility with one plumbed connection to OF 19])	Stormwater	Romero	1239	8.2W	18		VOCs, SVOCs, PAHs, TPH, PCBs, metals, phthalates	Only Parcel 2 drains to OF 19. Slag fill material. Former and current operations, caustic-lube oil and graphic lube oil discharges to storm drain.	p Low	TBD	Ongoing (anticipated 2nd Qtr. 2010)
Chapel Steel	Stormwater	Tarnow	4920	8.7W	18		PAHs, PCBs, metals, phthalates	Steel distributor, truck loading, trailer fabrication, and fork lift and tractor maintenance.	Not tracked in Miles		

Table 18. AOPC 18: Status of Adjacent or Immediately Upstream Current Ongoing and Potentially Ongoing Upland and Overwater Sources [a]

Site Name	Potential Contaminant Migration Pathway	DEQ PM	ECSI #	River Mile	AOPC	AOPC COIs	Upland and Overwater COIs	Potential Upland and Overwater Sources	DEQ Site Priority Level	DEQ Pathway Priority Level	Status of SCE
Christenson Oil	Stormwater	Rapp	2426	8.9W	19		VOCs, PAHs, TPH, metals	Historic spills, stormwater conveyance, unnamed creek	p Medium	p Medium	Ongoing (anticipated 1st Q 2011)
Penske Truck Leasing - NW Yeon	Stormwater	Harman	5055	8.6W	18		None	Site was redeveloped in 2007 under Stormwater Manual and is currently a truck rental facility. Site entered ICP in 2008.	Low	Low	p Complete (2008)
Dura Industries	Stormwater	Wistar	111	8.5W	18		Metals	Improper hazardous-waste management practices, potential soil contamination			

Notes: See last page of table for full list of footnotes.

Anderson Brothers	Stormwater	Schwarz	970	8W	18		VOCs, PAHs, TPH, PCBs, metals, pesticides, phthalates	Former UST, paint spill area, historical waste disposal system	Low	Low	Complete (2008)
Brazil & Co.	Stormwater	McClincy	1026	8.5W	18		PCBs	Suspected dismantling of transformers and spilled contents			
Mt Hood Chemicals	Stormwater	Orr	81	8.5W	18		VOCs	Possible leakage of feedstock drums containing corrosive acids & bases & flammable liquid chemicals	TBD	TBD	Ongoing (anticipated 4th Qtr. 2011)

Table 18. AOPC 18: Status of Adjacent or Immediately Upstream Current Ongoing and Potentially Ongoing Upland and Overwater Sources [a]

Site Name	Potential Contaminant Migration Pathway	DEQ PM	ECSI #	River Mile	AOPC	AOPC COIs	Upland and Overwater COIs	Potential Upland and Overwater Sources	DEQ Site Priority Level	DEQ Pathway Priority Level	Status of SCE
Mt Hood Chemicals	Groundwater	Orr	81	8.5W	18	**Metals** (Al, Ba, Cd, Cu, Fe, Mn, Hg, Ag, Zn), **total low PAHs**, **BnOH**, **total PCBs**, **pesticides** (delta-HCH, dieldrin, endrin), **chloroethane**	VOCs	Possible leakage of feedstock drums containing corrosive acids & bases & flammable liquid chemicals	TBD	TBD	Ongoing (anticipated 4th Qtr. 2011)
Mt Hood Property	Stormwater	Unassigned	1328	8.4W	18		VOCs	Bulk chemical storage and distribution			
Schnitzer Kittridge	Stormwater	Unassigned	2442	8.4W	18		None	Site was redeveloped in 1996 and is currently warehousing. Cleanup evaluation was after site redevelopment. Historical acetylene plant and lime recovery	Low	Low	Complete (2004)
Willbridge Yard	Stormwater	Rapp	3395	7.9W	18		Metals	Willbridge is a switching yard and there are no COI sources for contribution to the Willamette. DTL fueling done on emergency basis only with appropriate spill prevention procedures and measures. AST has been removed (with no observations of staining),	NA and not tracked in the Milestone Report	NA and not tracked in the Milestone Report	Preliminary Assessment & Expended PA Workplan was completed and submitted May 19, 2004, then revised and resubmitted August 21, 2006. Addendum to XPA Work Plan approved by DEQ on August 6, 2009 for NFA and SWSCD. Site work is ongoing.
Sources Upstream of AOPC 18 [c]											
Gunderson	See AOPC #19	Rapp	1155	8.8W							

Notes: See last page of table for full list of footnotes.

Table 18. AOPC 18: Status of Adjacent or Immediately Upstream Current Ongoing and Potentially Ongoing Upland and Overwater Sources [a]

Site Name	Potential Contaminant Migration Pathway	DEQ PM	ECSI #	River Mile	AOPC	AOPC COIs	Upland and Overwater COIs	Potential Upland and Overwater Sources	DEQ Site Priority Level	DEQ Pathway Priority Level	Status of SCE

Table 18. AOPC 18: Status of Adjacent or Immediately Upstream Current Ongoing and Potentially Ongoing Upland and Overwater Sources [a]

Site Name	Potential Contaminant Migration Pathway	DEQ PM	ECSI #	River Mile	AOPC	AOPC COIs	Upland and Overwater COIs	Potential Upland and Overwater Sources	DEQ Site Priority Level	DEQ Pathway Priority Level	Status of SCE

Notes:

[a] The information contained in this table is based on information obtained by LWG from correspondence with DEQ project managers and from reports in DEQ files as of ____ 2010. Information on sites upriver of RM 11 and sites within the s in the form of 104(e) information requests, and this is not a final list of sources that may be impacting the Study Area.

[b] SCE = Source Control Evaluation. This is the first step in DEQ's source evaluation process. The status of an SCE is either complete, ongoing, not started, TBD, or NA (for a pathway that is not applicable).

[c] SCD = Source Control Decision. DEQ provides EPA and its partners an opportunity to review (but not approve or disapprove) the DEQ SCD; the status of this review is described in the column, Status of EPA Review of SCE Decision, in th

[d] SCM = Source Control Measures. The final step in the source evaluation process; the implementation status of the SCMs is either complete, ongoing, not started, TBD, or NA.

[e] Adjacent sites are those with potential sources/pathways that are immediately adjacent to the reference AOPC, and upstream sites are those potential sources/pathways that are upstream of the reference AOPC and not reference with any other .

[f] This pathway is included for ECSI sites that have groundwater infiltration into the City storm sewer. For sites without this pathway, assume there is no groundwater infiltration into the City storm sewer.

p = DEQ's preliminary pathway determination
? = Unknown, typically due to lack of sampling information
Italicized cells indicate upland sites within current or former CSO basins. Non-italicized text indicates upland sites within stormwater basins.
Grey shading indicates shared conveyances.

Reference Citations:

Anchor QEA. 2009. Source Control Evaluation Report, McCall Oil and Chemical Site. Anchor QEA LLC, Portland, OR. February 2009.
City of Portland. 2008. City Outfall Basin 19 Inline Solids Sampling at the Former Calbag Metals Site. City of Portland, OR. February 2008.
City of Portland. 2009. City Outfall Basin 19 Inline Solids Sampling at the Former Calbag Metals Site. City of Portland, OR. April 2009.
City of Portland. 2010a. Source Investigation Update Report, City of Portland Outfall Basin 19. City of Portland, OR. June 2010.
City of Portland. 2010b. Stormwater Evaluation Report, City of Portland Outfall Project, ECSI 2425. City of Portland, OR. February 2010.
DEQ. 2009. Portland Harbor Joint Source Control Strategy - Milestone Report. Prepared by the Oregon Department of Environmental Quality, Portland, OR. December 2009.

Acronyms:

AOC = Administrative Order of Consent
AOPC = area of potential concern
AS/SVE = air sparging/soil vapor extraction
AST = aboveground storage tank
BEHP = bis-2-(ethylhexyl) phthalate
BMP = best management practices
BnOH = benzyl alcohol
COI = chemical of interest
CSO = combined sewer overflow
DEQ = Oregon Department Of Environmental Quality
DNAPL = dense non-aqueous phase liquid
ECSI = Environmental Cleanup Site Inventory
EE/CA = engineering evaluation/cost analysis
EIB = in situ bioremediation
EPA = Environmental Protection Agency
FS = feasibility study
GRH = gasoline-range hydrocarbon
GW = groundwater
JSCS = Joint Source Control Strategy
MS4 = municipal separate storm sewer systems
NA = not applicable
NAPL = non-aqueous phase liquid
NFA = no further action
NPDES = National Pollutant Discharge Elimination System
NS = no sampling of upland COIs reported. For stormwater/wastewater, no sampling beyond permit requirements reported.
ODOT = Oregon Department Of Transportation
OERS = Oregon Emergency Response System
PAH = polycyclic aromatic hydrocarbon
PCB = polyclorinated biphenyl
PM = project manager
POTW = publicly owned treatment works
PPA = Prospective Purchaser Agreement
RI = remedial investigation
ROD = record of decision
RP = responsible party
SVOC = semivolatile organic compound
SW = stormwater
SWPCP = stormwater pollution control plan
TBT - tributyl tin
TCE = trichloroethene
TPH = total petroleum hydrocarbon
UIC = underground injection control
UST = underground storage tank
VOC = volatile organic compound
XPA = expanded preliminary assessment

Table 18. AOPC 18: Status of Adjacent or Immediatel

Site Name	Potential Contaminant Migration Pathway	SCE [b]		SCM Selection [d]			SCM Implementation and Effectiveness			
		SCD [c]	SCE Findings and Next Steps	Status of SCM Selection	SCD	Next Steps and Schedule	Status of SCM Implementation and Effectiveness	SCD	Next Steps and Schedule	Post-Construction Monitoring Results
Sources Adjacent to AOPC 18 [e]										
McCall Oil	Groundwater	1st Quarter 2011	Data gaps to be filled in	TBD	TBD	TBD	TBD	TBD	TBD	TBD
McCall Oil	Stormwater	1st Quarter 2011	Data gaps to be filled in	TBD	TBD	TBD	TBD	TBD	TBD	TBD
McCall Oil	Overwater Activities	1st Quarter 2011	Release from Dock in November 2007	TBD	TBD	TBD	TBD	TBD	TBD	TBD
McCall Oil	Overland Transport	1st Quarter 2011	Data gaps to be filled in	TBD	TBD	TBD	TBD	TBD	TBD	TBD
McCall Oil	Bank Erosion	1st Quarter 2011	Data gaps to be filled in	TBD	TBD	TBD	TBD	TBD	TBD	TBD
Front Avenue LP Properties (CMI NW, Hampton, Lonestar/Glacier NW)	Groundwater	TBD	Conducting XPA and SCE	TBD	TBD	TBD	TBD	TBD	TBD	TBD
Front Avenue LP Properties (CMI NW, Hampton, Lonestar/Glacier NW)	Stormwater	TBD	Conducting XPA and SCE. Add'l sampling needed for SCE completion	TBD	TBD	TBD	TBD	TBD	TBD	TBD
Front Avenue LP Properties (CMI NW, Hampton, Lonestar/Glacier NW)	Overwater Activities	No known current sources (spills reported to OERS)	NA	NA	NA	NA	NA	NA	NA	NA
Front Avenue LP Properties (CMI NW, Hampton, Lonestar/Glacier NW)	Overland Transport	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 18. AOPC 18: Status of Adjacent or Immediatel

Site Name	Potential Contaminant Migration Pathway	SCE [b]		SCM Selection [d]			SCM Implementation and Effectiveness			
		SCD [c]	SCE Findings and Next Steps	Status of SCM Selection	SCD	Next Steps and Schedule	Status of SCM Implementation and Effectiveness	SCD	Next Steps and Schedule	Post-Construction Monitoring Results
Front Avenue LP Properties (CMI NW, Hampton, Lonestar/Glacier NW)	Bank Erosion	TBD	Conducting XPA and SCE	TBD	TBD	TBD	TBD	TBD	TBD	TBD
Shaver Transportation	Groundwater	Insignificant Pathway	No actions recommended, no SCMs needed	NA	NA	NA	NA	NA	NA	NA
Shaver Transportation	Stormwater	Insignificant Pathway	No actions recommended, no SCMs needed	NA	NA	NA	NA	NA	NA	NA
Shaver Transportation	Overwater Activities	Insignificant Pathway	No actions recommended, no SCMs needed	NA	NA	NA	NA	NA	NA	NA
Shaver Transportation	Overland Transport	Insignificant Pathway	No actions recommended, no SCMs needed	NA	NA	NA	NA	NA	NA	NA

Notes: See last page of table for full list of footnotes.

Table 18. AOPC 18: Status of Adjacent or Immediatel

Site Name	Potential Contaminant Migration Pathway	SCE [b]		SCM Selection [d]			SCM Implementation and Effectiveness			
		SCD [c]	SCE Findings and Next Steps	Status of SCM Selection	SCD	Next Steps and Schedule	Status of SCM Implementation and Effectiveness	SCD	Next Steps and Schedule	Post-Construction Monitoring Results
Shaver Transportation	Bank Erosion	Insignificant Pathway	No actions recommended, no SCMs needed	NA	NA	NA	NA	NA	NA	NA
Lakeside Industries	Groundwater	TBD	UIC closures in 2003	TBD	TBD	TBD	TBD	TBD	TBD	TBD
Lakeside Industries	Stormwater	TBD	Interim SCM; UIC closures in 2003	TBD	TBD	TBD	TBD	TBD	TBD	TBD
Lakeside Industries	Overwater Activities	No known current sources (spills reported to OERS)	NA	NA	NA	NA	NA	NA	NA	NA
Lakeside Industries	Overland Transport	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lakeside Industries	Bank Erosion	Insignificant Pathway	No actions recommended, no SCMs needed	NA	NA	NA	NA	NA	NA	NA
Shared Conveyance Systems										
OF19A	Stormwater	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD

Table 18. AOPC 18: Status of Adjacent or Immediatel

		SCE [b]		SCM Selection [d]			SCM Implementation and Effectiveness			
Site Name	**Potential Contaminant Migration Pathway**	**SCD [c]**	**SCE Findings and Next Steps**	**Status of SCM Selection**	**SCD**	**Next Steps and Schedule**	**Status of SCM Implementation and Effectiveness**	**SCD**	**Next Steps and Schedule**	**Post-Construction Monitoring Results**
OF19	Stormwater	p Complete Pathway	Conduct additional stormwater screening to determine presence of pesticides. Recommendation to DEQ on additional sites for Site Discovery based on inline solids evaluation (City of Portland 2010a)	Ongoing	BMP implementation through five 1200Z permits. Three properties implemented treatment per Stormwater Manual requirements. One site entered Cleanup program based on City recommendation. City abandoned lines adjacent to PGE-Forest Park site to eliminate potential pathway for legacy solids. Onsite SCMs being implemented at ECSI sites, including cleaning portion of City line (see below)	Once sites have completed SCEs, City will prepare RI/SCM document	Continue City MS4 and watershed SC programs to improve stormwater quality	TBD	TBD	TBD

Notes: See last page of table for full list of footnotes.

Table 18. AOPC 18: Status of Adjacent or Immediatel

Site Name	Potential Contaminant Migration Pathway	SCE [b]		SCM Selection [d]			SCM Implementation and Effectiveness			
		SCD [c]	SCE Findings and Next Steps	Status of SCM Selection	SCD	Next Steps and Schedule	Status of SCM Implementation and Effectiveness	SCD	Next Steps and Schedule	Post-Construction Monitoring Results
Greenway Recycling	Stormwater	Insignificant Pathway	NFA issued in 2009 based on all activities completed during site remediation and redevelopment, inclding soil removal, capping with asphalt, and installation of stormwater treatment	NA	NA	NA	NA	NA	NA	NA
PGE - Forest Park	Stormwater	Insignificant Pathway	PCBs found in surface and subsurface soils	Complete (2000)	Soil removal; disconnect site storm laterals from City system	Onsite SCMs implemented in 2000. Offsite evaluation of legacy contaminants and implementation of SCMs (removal) conducted in 2006.	Complete	NFA issued in 2001	SCD document needs to be prepared by DEQ, schedule TBD.	2005 PPA with City of Portland requires ongoing erosion control pending site development
Calbag Metals	Stormwater	Complete Pathway	Source of contaminants unknown	Complete (2005)	Stormwater catch basin, on- and off-site in-line cleanout, stormwater BMPs, monitoring	SCMs implemented in 2005 and DEQ issued NFA in 2005	Ongoing	Subsequent monitoring indicates site still a source of PCBs and potentially other COCs (City of Portland 2008, 2009); elevated concentrations but unknown mass.	Site has reentered Cleanup Program; catch basin sampling work plan expected fall 2010.	Post-SCM solids and SW monitoring indicated reduced loading and concnetrations in sediment and stormwater (DEQ NFA, 2005).
Conoco - Willbridge	Stormwater	~~Not tracked in Milestone Report~~. See Willbridge #1549								

Table 18. AOPC 18: Status of Adjacent or Immediatel

Site Name	Potential Contaminant Migration Pathway	SCE [b]		SCM Selection [d]			SCM Implementation and Effectiveness			
		SCD [c]	SCE Findings and Next Steps	Status of SCM Selection	SCD	Next Steps and Schedule	Status of SCM Implementation and Effectiveness	SCD	Next Steps and Schedule	Post-Construction Monitoring Results

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Table 18. AOPC 18: Status of Adjacent or Immediatel

Site Name	Potential Contaminant Migration Pathway	SCE [b]		SCM Selection [d]			SCM Implementation and Effectiveness			
		SCD [c]	SCE Findings and Next Steps	Status of SCM Selection	SCD	Next Steps and Schedule	Status of SCM Implementation and Effectiveness	SCD	Next Steps and Schedule	Post-Construction Monitoring Results
		DEQ concludes that this site is not a significant ongoing source of contaminants to the Willamette River, and that source control measures implemented at the site will prevent potential future significant impacts.								
Chevron Asphalt Refinery	Stormwater		Observations of sediment in City lines	Complete	DEQ concludes that this site is not a significant ongoing source of contaminants to the Willamette River, and that source control measures implemented at the site will prevent potential future significant impacts.		BMPs such as catch basin inserts, inspection and catch basin cleanout on periodic basis, storm line segments cleaned	Another SCD not anticipated	Another SCD not anticipated	Annual
	Groundwater Infiltration/ City Storm Sewer[g]	DEQ concludes that this site is not a significant ongoing source of contaminants to the Willamette River, and that source control measures implemented at the site will prevent potential future significant impacts.	Obervation of dry weather flow, generally in minimally-impacted areas	Insignificant pathway; no actions recommended	DEQ concludes that this site is not a significant ongoing source of contaminants to the Willamette River, and that source control measures implemented at the site will prevent potential future significant impacts.			Another SCD not anticipated	Another SCD not anticipated	
Front Avenue LP Properties (CMI NW, Hampton, Lonestar/Glacier NW - Tube Forgings is only facility with one plumbed connection to OF 19])	Stormwater	TBD	Conducting XPA and SCE. Add'l sampling needed for SCE completion	TBD	TBD	TBD	TBD	TBD	TBD	TBD
Chapel Steel	Stormwater	tone Report. Catch basin solids collected by DEQ Site Discovery found exceedances of SLVs but not sufficiently high to recommend a SCE.								

Table 18. AOPC 18: Status of Adjacent or Immediatel

Site Name	Potential Contaminant Migration Pathway	SCE [b]		SCM Selection [d]			SCM Implementation and Effectiveness			
		SCD [c]	SCE Findings and Next Steps	Status of SCM Selection	SCD	Next Steps and Schedule	Status of SCM Implementation and Effectiveness	SCD	Next Steps and Schedule	Post-Construction Monitoring Results
Christenson Oil	Stormwater	TBD	Stormwater sampling per JSCS and evaluation of groundwater preferential flow to stormwater	TBD	TBD	TBD	TBD	TBD	TBD	TBD
Penske Truck Leasing - NW Yeon	Stormwater	p Insignificant Pathway	NA	Site remediated before entering ICP	Soil removal and capping. Site redevelopment under City Stormwater Manual. NFA issued 2008.	NA	NA	NA	NA	NA
Dura Industries	Stormwater	Not tracked in Milestone Report [need additional information]								

Notes: See last page of table for full list of footnotes.

Anderson Brothers	Stormwater	Complete Pathway	Low levels of metals, PCBs, and pesticides, PAHs, and TPH from historic site use	Site evaluated under ICP	Line and catch basin cleaning, BMP implementation, asphalt resurfacing.. Soakage trench for roof drainage added under City Stormwater Manual		Complete	NFA in 2009. BMPs recommended	NA	NA
Brazil & Co.	Stormwater	Not tracked in Milestone Report [need additional information]								
Mt Hood Chemicals	Stormwater	TBD	SCE Work Plan and Implementation Pending	TBD	TBD	TBD	TBD	TBD	TBD	TBD

Table 18. AOPC 18: Status of Adjacent or Immediatel

Site Name	Potential Contaminant Migration Pathway	SCE [b]		SCM Selection [d]			SCM Implementation and Effectiveness			
		SCD [c]	SCE Findings and Next Steps	Status of SCM Selection	SCD	Next Steps and Schedule	Status of SCM Implementation and Effectiveness	SCD	Next Steps and Schedule	Post-Construction Monitoring Results
Mt Hood Chemicals	Groundwater	TBD	Ongoing remediaiton by subslab vapor extraction and ORC Injections for GW	TBD	TBD	TBD	TBD	TBD	TBD	TBD
Mt Hood Property	Stormwater	Not tracked in Milestone Report NFA (1995)								
Schnitzer Kittridge	Stormwater	Insignificant Pathway, with Institutional Controls.	2004 SCD identified data gaps related to possible site contamination from VOCs, SVOCs, PAHs, phenols, metals and PCBs in soil and groundwater	Complete (2006)	ROD, with conditional NFA, in 2007	NA	NA	NA	NA	NA
Willbridge Yard	Stormwater	TBD	Sampling Completed; Working with adjacent property owners to identify location and routing of stormwater lines to complete SCE.	TBD	TBD	TBD	TBD	TBD	TBD	TBD
Sources Upstream of AOPC 18 [e]										
Gunderson	See AOPC #19									

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Table 18. AOPC 18: Status of Adjacent or Immediatel

Site Name	Potential Contaminant Migration Pathway	SCE [b]		SCM Selection [d]			SCM Implementation and Effectiveness			
		SCD [c]	SCE Findings and Next Steps	Status of SCM Selection	SCD	Next Steps and Schedule	Status of SCM Implementation and Effectiveness	SCD	Next Steps and Schedule	Post-Construction Monitoring Results

Table 18. AOPC 18: Status of Adjacent or Immediatel

Site Name	Potential Contaminant Migration Pathway	SCE [b]		SCM Selection [d]			SCM Implementation and Effectiveness			
		SCD [c]	SCE Findings and Next Steps	Status of SCM Selection	SCD	Next Steps and Schedule	Status of SCM Implementation and Effectiveness	SCD	Next Steps and Schedule	Post-Construction Monitoring Results

Notes:

[a] ~~The information contained in this table is based on info~~shared stormwater conveyance systems is from RI Table 4.4-4 and from the DEQ ECSI database. Please note that source inventory is an ongoing process by DEQ and EPA, in the form of 104(e) information requests, and this is nc

[b] SCE = Source Control Evaluation. This is the first step

[c] SCD = Source Control Decision. DEQ provides EPA æ Milestone Report.

[d] SCM = Source Control Measures. The final step in the

[e] Adjacent sites are those with potential sources/pathwayAOPC.

[f] This pathway is included for ECSI sites that have groun

p = DEQ's preliminary pathway determination
? = Unknown, typically due to lack of sampling informa
Italicized cells indicate upland sites within current or foı
Grey shading indicates shared conveyances.

Reference Citations:

Anchor QEA. 2009. Source Control Evaluation Report
City of Portland. 2008. City Outfall Basin 19 Inline Sc
City of Portland. 2009. City Outfall Basin 19 Inline Sol
City of Portland. 2010a. Source Investigation Update F
City of Portland. 2010b. Stormwater Evaluation Report
DEQ. 2009. Portland Harbor Joint Source Control Stra

Acronyms:

AOC = Administrative Order of Consent
AOPC = area of potential concern
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AST = aboveground storage tank
BEHP = bis-2-(ethylhexyl) phthalate
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BnOH = benzyl alcohol
COI = chemical of interest
CSO = combined sewer overflow
DEQ = Oregon Department Of Environmental Quality
DNAPL = dense non-aqueous phase liquid
ECSI = Environmental Cleanup Site Inventory
EE/CA = engineering evaluation/cost analysis
EIB = in situ bioremediation
EPA = Environmental Protection Agency
FS = feasibility study
GRH = gasoline-range hydrocarbon
GW = groundwater
JSCS = Joint Source Control Strategy
MS4 = municipal separate storm sewer systems
NA = not applicable
NAPL = non-aqueous phase liquid
NFA = no further action

Table 19. AOPC 19: Status of Adjacent or Immediately Upstream Current Ongoing and Potentially Ongoing Upland and Overwater Sources [a]

Site Name	Potential Contaminant Migration Pathway	DEQ PM	ECSI #	River Mile	AOPC	AOPC COIs	Upland and Overwater COIs	Potential Upland and Overwater Sources	DEQ Site Priority Level	DEQ Pathway Priority Level	Status of SCE
Sources Adjacent to AOPC 19 [e]											
Lakeside Industries	Groundwater	Orr	2372	8.4W	19	**Metals** (Al, Ba, Cd, Cu, Fe, Mn, Hg, Ag, Zn)**, total low PAHs, BEHP, BnOH, PCBs** (total PCBs, total PCB TEQ)**, total TEQ, pesticides** (4,4'-DDT, aldrin, delta-HCH	VOCs	Former dry wells, Gunderson VOC groundwater plume, dock operations	p Low	p Low	Pending negotiations with Gundersons regarding VOC GW Plume
Lakeside Industries	Stormwater						NS			TBD	Pending negotiations with Gundersons regarding VOC GW Plume
Lakeside Industries	Overwater Activities						NS			None	NA
Lakeside Industries	Overland Transport						NS			None	NA
Lakeside Industries	Bank Erosion						NS			p Low	Pending negotiations with Gundersons regarding VOC GW Plume
Texaco Product Pipeline	Groundwater	McClincy	2117	8.7W	19		VOCs, PAHs, TPH	Marine Terminal closed (April 30, 2009) ~~Dock and overwater fueling activities~~	p Low	p Low	Ongoing (anticipated 4th Qtr 2010)
Texaco Product Pipeline	Stormwater						VOCs, PAHs, TPH			None	NA
Texaco Product Pipeline	Overwater Activities						VOCs, PAHs, TPH			None	NA
Texaco Product Pipeline	Overland Transport						NS			None	NA
Texaco Product Pipeline	Bank Erosion						NS			None	NA

Table 19. AOPC 19: Status of Adjacent or Immediately Upstream Current Ongoing and Potentially Ongoing Upland and Overwater Sources [a]

Site Name	Potential Contaminant Migration Pathway	DEQ PM	ECSI #	River Mile	AOPC	AOPC COIs	Upland and Overwater COIs	Potential Upland and Overwater Sources	DEQ Site Priority Level	DEQ Pathway Priority Level	Status of SCE
Gunderson	Groundwater - Area 1	Rapp	1155	9.0W	19	DDT, aldrin, delta HCH, dieldrin, endrin, endrin ketone, sum DDE, total DDx), **chloroethane**	VOCs, PAHs, TPH, metals	Former TCA tank, marine paint and blast areas, launchways, former salvage yard, hazardous materials storage areas, marine barge launchways, railcar storage on outfitting dock, fill material in Area 3	High	p Medium	Initial Screening Completed; GW SCE anticipated 1st Q 2011
Gunderson	Groundwater - Area 2						VOCs, PAHs, TPH, metals			p Medium	Initial Screening Completed; GW SCE anticipated 1st Q 2011
Gunderson	Groundwater - Area 3						VOCs, PAHs, TPH, metals			p Medium	Initial Screening Completed; GW SCE anticipated 1st Q 2011
Gunderson	Stormwater - Area 1						TPH, PCBs, metals, butyltins, phthalates			p Medium	Ongoing (anticipated 2nd Q 2011)

Notes: See last page of table for full list of footnotes.

Table 19. AOPC 19: Status of Adjacent or Immediately Upstream Current Ongoing and Potentially Ongoing Upland and Overwater Sources [a]

Site Name	Potential Contaminant Migration Pathway	DEQ PM	ECSI #	River Mile	AOPC	AOPC COIs	Upland and Overwater COIs	Potential Upland and Overwater Sources	DEQ Site Priority Level	DEQ Pathway Priority Level	Status of SCE
Gunderson	Stormwater - Area 2	Rapp	1155	9.0W	19	**Metals** (Al, Ba, Cd, Cu, Fe, Mn, Hg, Ag, Zn), **total low PAHs, BEHP, BnOH, PCBs** (total PCBs, total PCB TEQ), **total TEQ, pesticides** (4,4'-DDT, aldrin, delta-HCH, dieldrin, endrin, endrin ketone, sum DDE, total DDx), **chloroethane**	TPH, PCBs, metals, butyltins, phthalates	Former TCA tank, marine paint and blast areas, launchways, former salvage yard, hazardous materials storage areas, marine barge launchways, railcar storage on outfitting dock, fill material in Area 3	High	p High	Ongoing (anticipated 2nd Q 2011)
Gunderson	Stormwater - Area 3						TPH, PCBs, metals, butyltins, phthalates			High	Ongoing (anticipated 2nd Q 2011)
Gunderson	Overwater - Area 3						VOCs, metals			None	NA
Gunderson	Overland Transport - Area 1						NA			None	NA

Table 19. AOPC 19: Status of Adjacent or Immediately Upstream Current Ongoing and Potentially Ongoing Upland and Overwater Sources [a]

Site Name	Potential Contaminant Migration Pathway	DEQ PM	ECSI #	River Mile	AOPC	AOPC COIs	Upland and Overwater COIs	Potential Upland and Overwater Sources	DEQ Site Priority Level	DEQ Pathway Priority Level	Status of SCE
Gunderson	Overland Transport - Area 2						VOCs, PAHs, PCBs, metals			p High	Ongoing (anticipated 2nd Q 2011) - THIS DATE WILL BE PROVIDED IN THE REPORT ON THE STORMWATER AND CATCHBASIN EVALUATION - work to start in Q3 of 2010 pending DEQ approval of plan

Notes: See last page of table for full list of footnotes.

Gunderson	Overland Transport - Area 3						VOCs, PAHs, PCBs, metals			p High	Ongoing (anticipated 2nd Q 2011) - THIS DATE WILL BE PROVIDED IN THE REPORT ON THE STORMWATER AND CATCHBASIN EVALUATION - work to start in Q3 of 2010 pending DEQ approval of plan
Gunderson	Bank Erosion - Area 1					**Metals** (Al, Ba, Cd, Cu, Fe, Mn, Hg, Ag, Zn), **total low PAHs, BEHP, BnOH, PCBs**	VOCs, PAHs, PCBs, metals	Former TCA tank, marine paint and blast areas, launchways		p Low	Currently sampling riverbank soils in Area 2 and 3 (Oct. 2010); Anticipate SCE for Riverbank soil 4th Q 2010

Table 19. AOPC 19: Status of Adjacent or Immediately Upstream Current Ongoing and Potentially Ongoing Upland and Overwater Sources [a]

Site Name	Potential Contaminant Migration Pathway	DEQ PM	ECSI #	River Mile	AOPC	AOPC COIs	Upland and Overwater COIs	Potential Upland and Overwater Sources	DEQ Site Priority Level	DEQ Pathway Priority Level	Status of SCE
Gunderson	Bank Erosion - Area 2	Rapp	1155	9.0W	19	**PAHs, BEHP, BHCH, PCBs** (total PCBs, total PCB TEQ), **total TEQ, pesticides** (4,4'-DDT, aldrin, delta-HCH, dieldrin, endrin, endrin ketone, sum DDE, total DDx), **chloroethane**	VOCs, PAHs, PCBs, metals	and blast areas, launchways, former salvage yard, hazardous materials storage areas, marine barge launchways, railcar storage on outfitting dock, fill material in Area 3	High	High	Currently sampling riverbank soils in Area 2 and 3 (Oct. 2010); Anticipate SCE for Riverbank soil 4th Q 2010
Gunderson	Bank Erosion - Area 3						VOCs, PAHs, PCBs, metals			High	Currently sampling riverbank soils in Area 2 and 3 (Oct. 2010); Anticipate SCE for Riverbank soil 4th Q 2010

Notes: See last page of table for full list of footnotes.

Table 19. AOPC 19: Status of Adjacent or Immediately Upstream Current Ongoing and Potentially Ongoing Upland and Overwater Sources [a]

Site Name	Potential Contaminant Migration Pathway	DEQ PM	ECSI #	River Mile	AOPC	AOPC COIs	Upland and Overwater COIs	Potential Upland and Overwater Sources	DEQ Site Priority Level	DEQ Pathway Priority Level	Status of SCE
Shared Conveyance Systems											
OF18	Stormwater	Tarnow	2425	8.8W	19	**Metals** (Al, Ba, Cd, Cu, Fe, Mn, Hg, Ag, Zn), **total low PAHs**, **BEHP**, **BnOH**, **PCBs** (total PCBs, total PCB TEQ), **total TEQ**, **pesticides** (4,4'-DDT, aldrin, delta-HCH, dieldrin, endrin, endrin ketone, sum DDE, total DDx), **chloroethane**	PCBs, DDx, chlordane, heptachlor, copper (City of Portland 2010)	Drains 190 acres of heavy industry and 7 acres of major transportation. See below for identified sources	Medium	p Medium	p Complete (2005)
Columbia American Plating	Stormwater	Pugh	29	9.3W	19		VOCs, SVOCs, PCBs, metals, Other (e.g., cyanide), PAHs, phthalates	Metal plating operations, spills and releases	p Low	p Low	New stormwater system to be installed; will require SCE monitoring
Gunderson	Stormwater	Rapp	1155	9.0W	19		Metals, PAHs, phthalates, PCBs	Small area (~2 acres) that is fully paved and much of which is covered by a building and discharges through oil-water separator.			Ongoing (anticipated 2nd Q 2011)
McWhorter Technologies	Stormwater	Unassigned	135	8.8W	19		VOCs, SVOCs, PAHs, TPH, phthalates	Historical spills or releases from tanks and pipelines, former creek	DEQ LUST Program NFA (1991) for the sou		
Christenson Oil	Stormwater	Rapp	2426	8.9W	19	**Metals** (Al, Ba, Cd, Cu, Fe, Mn, Hg, Ag, Zn), **total low PAHs**, **BEHP**, **BnOH**, **PCBs** (total PCBs, total PCB TEQ), **total TEQ**, **pesticides** (4,4'-DDT, aldrin, delta-HCH, dieldrin, endrin, endrin ketone, sum DDE, total DDx), **chloroethane**	VOCs, PAHs, TPH, metals	Historic spills, stormwater conveyance, unnamed creek	p Medium	p Medium	Ongoing (anticipated 2nd Q 2011)

Table 19. AOPC 19: Status of Adjacent or Immediately Upstream Current Ongoing and Potentially Ongoing Upland and Overwater Sources [a]

Site Name	Potential Contaminant Migration Pathway	DEQ PM	ECSI #	River Mile	AOPC	AOPC COIs	Upland and Overwater COIs	Potential Upland and Overwater Sources	DEQ Site Priority Level	DEQ Pathway Priority Level	Status of SCE
Container Recovery	Stormwater	Tarnow	4015	8.8W	19		PAHs, PCBs, metals, phthalates	Truck fabricating activities, furnace manufacturing, sheet metal fabrication, stormwater discharges to COP storm sewer	Low	Low	Deferred (no current schedule)
Wilhelm Trucking (aka Magnus Wilhelm)	Stormwater	Orr	69	9.3W	19		PCBs, metals	Trucking facility. Storage of transformers. Former lead bearing rehabilitation plant	TBD	TBD	Ongoing (anticipated 4th Qtr. 2010)
Trumbull Asphalt Plant	Stormwater	Tarnow	1160	9.1W	19		PAHs, PCBs, metals, phthalates	Asphalt tank farm, roofing production line (historical wastewater discharge to Outfall 18), boiler lines and fuel tank, fume line	Low	Low	Deferred (no current schedule)
Van Waters & Rogers/Univar	Stormwater	Arrigoni (EPA)	330	9.0W	19		VOCs, TPH, pesticide/herbicides, metals	Former recycling area, loading dock area, spill areas	TBD	TBD	Ongoing (anticipated 2nd Qtr. 2010) EPA needs to update this
Van Waters & Rogers/Univar	Groundwater Infiltration/ City Storm Sewer[g]	Arrigoni (EPA)	330	9.0W	19		Included in SW eval; Ask EPA for update				

Notes: See last page of table for full list of footnotes.

Table 19. AOPC 19: Status of Adjacent or Immediately Upstream Current Ongoing and Potentially Ongoing Upland and Overwater Sources [a]

Site Name	Potential Contaminant Migration Pathway	DEQ PM	ECSI #	River Mile	AOPC	AOPC COIs	Upland and Overwater COIs	Potential Upland and Overwater Sources	DEQ Site Priority Level	DEQ Pathway Priority Level	Status of SCE
Container Management	Stormwater	Orr	4784	9.3W	19	**Metals** (Al, Ba, Cd, Cu, Fe, Mn, Hg, Ag, Zn), **total low PAHs**, **BEHP**, **BnOH**, **PCBs** (total PCBs, total PCB TEQ), **total TEQ**, **pesticides** (4,4'-DDT, aldrin, delta-HCH, dieldrin, endrin, endrin ketone, sum DDE, total DDx), **chloroethane**	PAHs, TPH, PCBs, metals, phthalates, pesticides (Container Management 2010)	Container reconditioning facility, water from oil/water separator discharged to COP storm sewer	p Medium	p Medium	Ongoing (anticipated 2nd Qtr. 2011)
ANRFS	Stormwater	Tarnow	1820	9.5W	19		PAHs, PCBs, metals, phthalates	No information was found regarding site activities.			
Ashland Chemical	Stormwater	Tarnow	1076	9.5W	19		PAHs, PCBs, metals, phthalates	Former food processing facility, currently a chemical storage facility, stormwater discharges to COP storm sewer pipe			
Carson Oil	Stormwater	Tarnow	1405	9.7W	19		VOCs, PAHs, TPH, PCBs, metals, phthalates	Historical pipe leaks and spills, LUSTs, vehicle maintenance activities involving fuels, oil and grease, petroleum-based solvents, surface water discharges to COP storm sewer			
Texaco Equilon Pipeline	Stormwater	McClincy	2117	8.7W	19		VOCs, PAHs, TPH	~~Dock and overwater fueling activities~~ Marine Terminal closed April 30, 2009.	p Low	None	NA
Texaco Equilon Bulk Terminal	Stormwater	McClincy	169	8.9W	19		VOCs, PAHs, TPH, metals	Pipe containment, ASTs, ~~foundary sand~~ (? Assume mean spent sandblast media), historical wooden flume and utilities (possibly a preferential GW pathway)	p Low	TBD	Ongoing (anticipated 2nd Qtr 2011 per 2010 DEQ Milestone Report ~~3rd Qtr. 2010~~)
	Groundwater Infiltration/ City Storm Sewer[g]										Ongoing (URS 2010)

Table 19. AOPC 19: Status of Adjacent or Immediately Upstream Current Ongoing and Potentially Ongoing Upland and Overwater Sources [a]

Site Name	Potential Contaminant Migration Pathway	DEQ PM	ECSI #	River Mile	AOPC	AOPC COIs	Upland and Overwater COIs	Potential Upland and Overwater Sources	DEQ Site Priority Level	DEQ Pathway Priority Level	Status of SCE
Portland Terminal Railroad (aka Guilds Lake RR Yard)	Stormwater	Orr	100	9.0W	19		VOCs, SVOCs, PAHs, TPH, PCBs, metals, phthalates, Other (e.g., sodium cyanide, ethylene glycol, creosote constituents)	Railroad switching yard	p Low	TBD	Ongoing (anticipated 4th Qtr. 2010)
Schnitzer Investment - NE 35th (formerly Chase Bag)	Stormwater	Fortuna	2424	9.2W	19		VOC, SVOCs, metals	Subsurface groundwater VOC plume, former UST, observed leaking drums along east and south boundaries, observed pool of petroleum substance			
Sources Upstream of AOPC 19 [c]											
POP Terminal 2	See AOPC #20	Gainer	2769								

Notes: See last page of table for full list of footnotes.

Table 19. AOPC 19: Status of Adjacent or Immediately Upstream Current Ongoing and Potentially Ongoing Upland and Overwater Sources [a]

Site Name	Potential Contaminant Migration Pathway	DEQ PM	ECSI #	River Mile	AOPC	AOPC COIs	Upland and Overwater COIs	Potential Upland and Overwater Sources	DEQ Site Priority Level	DEQ Pathway Priority Level	Status of SCE

Notes:

[a] The information contained in this table is based on information obtained by LWG from correspondence with DEQ project managers and from reports in DEQ files as of ____ 2010. Information on sites upriver of RM 11 and sites within the s in the form of 104(e) information requests, and this is not a final list of sources that may be impacting the Study Area.

[b] SCE = Source Control Evaluation. This is the first step in DEQ's source evaluation process. The status of an SCE is either complete, ongoing, not started, TBD, or NA (for a pathway that is not applicable).

[c] SCD = Source Control Decision. DEQ provides EPA and its partners an opportunity to review (but not approve or disapprove) the DEQ SCD; the status of this review is described in the column, Status of EPA Review of SCE Decision, in th

[d] SCM = Source Control Measures. The final step in the source evaluation process; the implementation status of the SCMs is either complete, ongoing, not started, TBD, or NA.

[e] Adjacent sites are those with potential sources/pathways that are immediately adjacent to the reference AOPC, and upstream sites are those potential sources/pathways that are upstream of the reference AOPC and not reference with any other .

[f] This pathway is included for ECSI sites that have groundwater infiltration into the City storm sewer. For sites without this pathway, assume there is no groundwater infiltration into the City storm sewer.

p = DEQ's preliminary pathway determination
? = Unknown, typically due to lack of sampling information
Italicized cells indicate upland sites within current or former CSO basins. Non-italicized text indicates upland sites within stormwater basins.
Grey shading indicates shared conveyances.

Reference Citations:

City of Portland. 2010. Stormwater Evaluation Report, City of Portland Outfall Project, ECSI 2425. City of Portland, OR. February 2010.
Container Management. 2010. Email of April 1, 2010 to DEQ transmitting soil and sediment data. Container Management Inc., Portland, OR.
DEQ. 2009. Portland Harbor Joint Source Control Strategy - Milestone Report. Prepared by the Oregon Department of Environmental Quality, Portland, OR. December 2009.
URS. 2010.

Acronyms:

AOC = Administrative Order of Consent
AOPC = area of potential concern
AS/SVE = air sparging/soil vapor extraction
AST = aboveground storage tank
BEHP = bis-2-(ethylhexyl) phthalate
BMP = best management practices
BnOH = benzyl alcohol
COI = chemical of interest
CSO = combined sewer overflow
DEQ = Oregon Department Of Environmental Quality
DNAPL = dense non-aqueous phase liquid
ECSI = Environmental Cleanup Site Inventory
EE/CA = engineering evaluation/cost analysis
EIB = in situ bioremediation
EPA = Environmental Protection Agency
FS = feasibility study
GRH = gasoline-range hydrocarbon
GW = groundwater
JSCS = Joint Source Control Strategy
MS4 = municipal separate storm sewer systems
NA = not applicable
NAPL = non-aqueous phase liquid
NFA = no further action
NPDES = National Pollutant Discharge Elimination System
NS = no sampling of upland COIs reported. For stormwater/wastewater, no sampling beyond permit requirements reported.
ODOT = Oregon Department Of Transportation
OERS = Oregon Emergency Response System
PAH = polycyclic aromatic hydrocarbon
PCB = polyclorinated biphenyl
PM = project manager
POTW = publicly owned treatment works
PPA = Prospective Purchaser Agreement
RI = remedial investigation
ROD = record of decision
RP = responsible party
SVOC = semivolatile organic compound
SW = stormwater
SWPCP = stormwater pollution control plan
TBT - tributyl tin
TCE = trichloroethene
TPH = total petroleum hydrocarbon
UIC = underground injection control
UST = underground storage tank
VOC = volatile organic compound
XPA = expanded preliminary assessment

Table 19. AOPC 19: Status of Adjacent or Immediatel

Site Name	Potential Contaminant Migration Pathway	SCE [b]		SCM Selection [d]			SCM Implementation and Effectiveness			
		SCD [c]	SCE Findings and Next Steps	Status of SCM Selection	SCD	Next Steps and Schedule	Status of SCM Implementation and Effectiveness	SCD	Next Steps and Schedule	Post-Construction Monitoring Results
Sources Adjacent to AOPC 19 [e]										
Lakeside Industries	Groundwater	TBD	UIC closures in 2003	TBD	TBD	TBD	TBD	TBD	TBD	TBD
Lakeside Industries	Stormwater	TBD	Interim SCM; UIC closures in 2003	TBD	TBD	TBD	TBD	TBD	TBD	TBD
Lakeside Industries	Overwater Activities	No known current sources (spills reported to OERS)	NA	NA	NA	NA	NA	NA	NA	NA
Lakeside Industries	Overland Transport	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lakeside Industries	Bank Erosion	Insignificant Pathway	No actions recommended, no SCMs needed	NA	NA	NA	NA	NA	NA	NA
Texaco Product Pipeline	Groundwater	TBD	Review of Guilds Lake Rail Yard and Gunderson data	Waiting for SCE to be completed	TBD	TBD	TBD	TBD	TBD	TBD
Texaco Product Pipeline	Stormwater	NA	NA	NA	NA	NA	NA	NA	NA	NA
Texaco Product Pipeline	Overwater Activities	NA	NA	NA	NA	NA	NA	NA	NA	NA
Texaco Product Pipeline	Overland Transport	NA	NA	NA	NA	NA	NA	NA	NA	NA
Texaco Product Pipeline	Bank Erosion	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 19. AOPC 19: Status of Adjacent or Immediatel

Site Name	Potential Contaminant Migration Pathway	SCE [b]		SCM Selection [d]			SCM Implementation and Effectiveness			
		SCD [c]	SCE Findings and Next Steps	Status of SCM Selection	SCD	Next Steps and Schedule	Status of SCM Implementation and Effectiveness	SCD	Next Steps and Schedule	Post-Construction Monitoring Results
Gunderson	Groundwater - Area 1	Complete Pathway	VOC plume migrating to the river and with the groundwater gradient. Need to complete site-wide GW screening to update sampling program . SEE NOTE 3	Completed (TBD - see NOTE 1)	Hydraulic containment and source removal using air-sparging/soil vapor extraction (AS/SVE). Quarterly performance monitoring and reporting	Conduct SCMs effectiveness evaluation(s). Schedule TBD	TBD	TBD	TBD	TBD
Gunderson	Groundwater - Area 2	TBD	DEQ is reviewing revised Work Plan submitted May 2010. Also see comment for Area 1 above	TBD	TBD	TBD	TBD	TBD	TBD	TBD
Gunderson	Groundwater - Area 3	Complete Pathway	DEQ is reviewing revised Work Plan submitted May 2010. Also see comment for Area 1 above	TBD	TBD	TBD	TBD	TBD	TBD	TBD
Gunderson	Stormwater - Area 1	TBD	DEQ is reviewing February 2010 SW/catchbasin SAP. Results of work anticipated Q1 2011 - see notes on Areas 2 and 3 below	Ongoing	Implement Best Management Practices per SWPCP.	TBD	TBD	TBD	TBD	TBD

Notes: See last page of table for full list of footnotes.

Table 19. AOPC 19: Status of Adjacent or Immediatel

Site Name	Potential Contaminant Migration Pathway	SCE [b]		SCM Selection [d]			SCM Implementation and Effectiveness			
		SCD [c]	SCE Findings and Next Steps	Status of SCM Selection	SCD	Next Steps and Schedule	Status of SCM Implementation and Effectiveness	SCD	Next Steps and Schedule	Post-Construction Monitoring Results
Gunderson	Stormwater - Area 2	Complete Pathway	DEQ is reviewing February 2010 SW/catchbasin SAP. Pending results, will evaluate upgrades to SW system around launchways - piping and treatment.	Ongoing	Implement Best Management Practices per SWPCP.	TBD	TBD	TBD	TBD	TBD
Gunderson	Stormwater - Area 3	Complete Pathway	DEQ is reviewing February 2010 SW/catchbasin SAP. Pending results, will evaluate upgrades to SW system around launchways - piping and treatment. SEE NOTE 4	Ongoing	Implement Best Management Practices per SWPCP.	TBD	TBD	TBD	TBD	TBD
Gunderson	Overwater - Area 3	No known current sources (spills will be reported to OERS)	NA	NA	NA	NA	NA	NA	NA	NA
Gunderson	Overland Transport - Area 1	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 19. AOPC 19: Status of Adjacent or Immediatel

Site Name	Potential Contaminant Migration Pathway	SCE [b]		SCM Selection [d]			SCM Implementation and Effectiveness			
		SCD [c]	SCE Findings and Next Steps	Status of SCM Selection	SCD	Next Steps and Schedule	Status of SCM Implementation and Effectiveness	SCD	Next Steps and Schedule	Post-Construction Monitoring Results
Gunderson	Overland Transport - Area 2	Complete Pathway	Waiting on SCE completion	TBD	TBD	TBD	TBD	TBD	TBD	TBD

Notes: See last page of table for full list of footnotes.

Gunderson	Overland Transport - Area 3	Complete Pathway	Waiting on SCE completion	TBD	TBD	TBD	TBD	TBD	TBD	TBD
Gunderson	Bank Erosion - Area 1	TBD	Waiting on SCE completion; survey of erodible soils, follow up sampling	TBD	TBD	TBD	TBD	TBD	TBD	TBD

Table 19. AOPC 19: Status of Adjacent or Immediatel

		SCE [b]		SCM Selection [d]			SCM Implementation and Effectiveness			
Site Name	Potential Contaminant Migration Pathway	SCD [c]	SCE Findings and Next Steps	Status of SCM Selection	SCD	Next Steps and Schedule	Status of SCM Implementation and Effectiveness	SCD	Next Steps and Schedule	Post-Construction Monitoring Results
			2 FFS's drafted and rejected by DEQ in early 2009 for lack of data, sampling work plans and FFS revisions pending. In May 2010, Gunderson submitted supplemental SCE SAP Work Plan based on FFS comments and historic site data. Results anticipated Q3 2010							
Gunderson	Bank Erosion - Area 2	Complete Pathway		Ongoing	Implement Best Management Practices per SWPCP.	TBD	TBD	TBD	TBD	TBD
Gunderson	Bank Erosion - Area 3	Complete Pathway	In May 2010, Gunderson submitted supplemental SCE SAP Work Plan. Results anticipated Q3 2010. Final SCMs TBD	Ongoing	Final SCMs TBD. Interim SCMs included SWPCP BMPs.	TBD	TBD	TBD	TBD	TBD

Notes: See last page of table for full list of footnotes.

Table 19. AOPC 19: Status of Adjacent or Immediatel

Site Name	Potential Contaminant Migration Pathway	SCE [b]		SCM Selection [d]			SCM Implementation and Effectiveness			
		SCD [c]	SCE Findings and Next Steps	Status of SCM Selection	SCD	Next Steps and Schedule	Status of SCM Implementation and Effectiveness	SCD	Next Steps and Schedule	Post-Construction Monitoring Results
Shared Conveyance Systems										
OF18	Stormwater	p Complete Pathway	Source tracing nearly complete. 2 sites entered Cleanup program. DEQ Site discovery at 5 sites. See below for Site findings.	Ongoing	BMPs implemented under 13 NPDES permits. Two properties implemented treatment for portion of site. Targeted line cleaning. Onsite SCMs being implemented at ECSI sites (see below).	Once sites have completed SCEs, City will prepare RI/SCM document	Continue City MS4 and watershed SC programs to improve stormwater quality	TBD	TBD	TBD
Columbia American Plating	Stormwater	Complete Pathway	Perliminary Stormwater sampling, catch basin and line cleanout were completed in 2009	Pending	Pending	Post-cleanout stormwater sampling. Final evaluation report schedule for completion, Ist quarter 2011	TBD	TBD	Stormwater system installation and sampling	TBD
Gunderson	Stormwater	Complete Pathway	DEQ is reviewing February 2010 SW/catchbasin SAP. Will evaluate results and review them for implications on source control. SEE NOTE 4	Ongoing	Implement Best Management Practices per SWPCP.					
McWhorter Technologies	Stormwater	Not tracked in Milestone Report thern portion of the Site (NFA exluded Portland Harbor SCE. Texaco Equlon Bulk Terminal SCE is expected to evaluate the Texaco/McWhorter groundwater plume). Northern potion of site to be evalauted under Portland Terminal RR (ECSI #100)								
Christenson Oil	Stormwater	TBD	Stormwater sampling per JSCS and evaluation of groundwater preferential flow to stormwater	Ongoing	Storm water BMPs and filtering catch basin sediment	TBD	TBD	TBD	TBD	TBD

Table 19. AOPC 19: Status of Adjacent or Immediatel

Site Name	Potential Contaminant Migration Pathway	SCE [b]		SCM Selection [d]			SCM Implementation and Effectiveness			
		SCD [c]	SCE Findings and Next Steps	Status of SCM Selection	SCD	Next Steps and Schedule	Status of SCM Implementation and Effectiveness	SCD	Next Steps and Schedule	Post-Construction Monitoring Results
Container Recovery	Stormwater	TBD	Complete stormwater characterization	Deferred (no current schedule)	Deferred (no current schedule)	Deferred (no current schedule)	Deferred (no current schedule)	Deferred (no current schedule)	Deferred (no current schedule)	Deferred (no current schedule)
Wilhelm Trucking (aka Magnus Wilhelm)	Stormwater	TBD	Work Plan under review	TBD	TBD	TBD	TBD	TBD	TBD	TBD
Trumbull Asphalt Plant	Stormwater	TBD	Complete stormwater characterization	Deferred (no current schedule)	Deferred (no current schedule)	Deferred (no current schedule)	Deferred (no current schedule)	Deferred (no current schedule)	Deferred (no current schedule)	Deferred (no current schedule)
Van Waters & Rogers/Univar	Stormwater	TBD	Complete stormwater pathway evaluation	TBD	TBD	TBD	TBD	TBD	TBD	TBD
Van Waters & Rogers/Univar	Groundwater Infiltration/ City Storm Sewer[g]			TBD	TBD	TBD	TBD	TBD	TBD	TBD

Notes: See last page of table for full list of footnotes.

Table 19. AOPC 19: Status of Adjacent or Immediatel

Site Name	Potential Contaminant Migration Pathway	SCE [b]		SCM Selection [d]			SCM Implementation and Effectiveness			
		SCD [c]	SCE Findings and Next Steps	Status of SCM Selection	SCD	Next Steps and Schedule	Status of SCM Implementation and Effectiveness	SCD	Next Steps and Schedule	Post-Construction Monitoring Results
Container Management	Stormwater	TBD	Storm solids and erodible soils sampling. Complete characterization	TBD	TBD	TBD	TBD	TBD	TBD	TBD
ANRFS	Stormwater	Not tracked in Milestone Report ECSI notes PAHs and PCBs in catch basin solids slightly exceed SLVs								
Ashland Chemical	Stormwater	Not tracked in Milestone Report ECSI notes metals, phthalates, and PCBs in catch basin solids exceed SLVs								
Carson Oil	Stormwater	Not tracked in Milestone Report ECSI notes phthalates and PCBs in catch basin solids exceed SLVs								
Texaco Equilon Pipeline	Stormwater	NA	NA	NA	NA	NA	NA	NA	NA	NA
Texaco Equilon Bulk Terminal	Stormwater	TBD	East tank farm soil removal. Line cleaning. Stormwater characterization in progress	Waiting for SCE to be completed	TBD	TBD	TBD	TBD	TBD	TBD
	Groundwater Infiltration/ City Storm Sewer[g]									

Table 19. AOPC 19: Status of Adjacent or Immediatel

Site Name	Potential Contaminant Migration Pathway	SCE [b]		SCM Selection [d]			SCM Implementation and Effectiveness			
		SCD [c]	SCE Findings and Next Steps	Status of SCM Selection	SCD	Next Steps and Schedule	Status of SCM Implementation and Effectiveness	SCD	Next Steps and Schedule	Post-Construction Monitoring Results
Portland Terminal Railroad (aka Guilds Lake RR Yard)	Stormwater	TBD	Stormwater investigation ongoing	Waiting for SCE to be completed	TBD	TBD	TBD	TBD	TBD	TBD
Schnitzer Investment - NE 35th (formerly Chase Bag)	Stormwater	Not tracked in Milestone Report [additional info requested]								
Sources Upstream of AOPC 19 [e]										
POP Terminal 2	See AOPC #20									

Notes: See last page of table for full list of footnotes.

Table 19. AOPC 19: Status of Adjacent or Immediatel

Site Name	Potential Contaminant Migration Pathway	SCE [b]		SCM Selection [d]			SCM Implementation and Effectiveness			
		SCD [c]	SCE Findings and Next Steps	Status of SCM Selection	SCD	Next Steps and Schedule	Status of SCM Implementation and Effectiveness	SCD	Next Steps and Schedule	Post-Construction Monitoring Results

Notes:

[a] ~~The information contained in this table is based on info~~shared stormwater conveyance systems is from RI Table 4.4-4 and from the DEQ ECSI database. Please note that source inventory is an ongoing process by DEQ and EPA, in the form of 104(e) information requests, and this is nc

[b] SCE = Source Control Evaluation. This is the first step

[c] SCD = Source Control Decision. DEQ provides EPA æ Milestone Report.

[d] SCM = Source Control Measures. The final step in the

[e] Adjacent sites are those with potential sources/pathwayAOPC.

[f] This pathway is included for ECSI sites that have groun

p = DEQ's preliminary pathway determination
? = Unknown, typically due to lack of sampling informa
Italicized cells indicate upland sites within current or foı
Grey shading indicates shared conveyances.

Reference Citations:

City of Portland. 2010. Stormwater Evaluation Report,
Container Management. 2010. Email of April 1, 2010 t
DEQ. 2009. Portland Harbor Joint Source Control Stra
URS. 2010.

Acronyms:

AOC = Administrative Order of Consent
AOPC = area of potential concern
AS/SVE = air sparging/soil vapor extraction
AST = aboveground storage tank
BEHP = bis-2-(ethylhexyl) phthalate
BMP = best management practices
BnOH = benzyl alcohol
COI = chemical of interest
CSO = combined sewer overflow
DEQ = Oregon Department Of Environmental Quality
DNAPL = dense non-aqueous phase liquid
ECSI = Environmental Cleanup Site Inventory
EE/CA = engineering evaluation/cost analysis
EIB = in situ bioremediation
EPA = Environmental Protection Agency
FS = feasibility study
GRH = gasoline-range hydrocarbon
GW = groundwater
JSCS = Joint Source Control Strategy
MS4 = municipal separate storm sewer systems
NA = not applicable
NAPL = non-aqueous phase liquid
NFA = no further action

Table 20. AOPC 20: Status of Adjacent or Immediately Upstream Current Ongoing and Potentially Ongoing Upland and Overwater Sources [a]

Site Name	Potential Contaminant Migration Pathway	DEQ PM	ECSI #	River Mile	AOPC	AOPC COIs	Upland and Overwater COIs	Potential Upland and Overwater Sources	DEQ Site Priority Level	DEQ Pathway Priority Level	Status of SCE
Sources Adjacent to AOPC 20 [e]											
POP Terminal 2	Groundwater	Gainer	2769	10W	20	**Metals** (Cd, Cu, Pb, Hg, Zn), **total low PAHs, BnOH, total PCBs, total TEQ**, **pesticides** (4,4'-DDT, total DDx)	NA	Current facility operations	p Low	p Low	Ongoing (3rd Qtr. 2010)
POP Terminal 2	Stormwater						PAH, TPH			p Low	Ongoing (3rd Qtr. 2010)
POP Terminal 2	Overwater						NS			None	NA
POP Terminal 2	Overland Transport						NA			None	NA
POP Terminal 2	Bank Erosion						NS			None	NA
Shared Conveyance Systems											
OF16	Stormwater	Tarnow	2425	9.8W	20	**Metals** (Cd, Cu, Pb, Hg, Zn), **total low PAHs**, **BnOH**, **total PCBs**, **total TEQ**, **pesticides** (4,4'-DDT, total DDx)	PCBs, phthalates, copper (City of Portland 2010)	Drains 61 acres of heavy industry and 5 acres of major transportation. See below for identified sources.	Medium	p Medium	p Complete (2010)
Calbag - Nicolai	Stormwater	Orr	5059	10.3W	20		TPH, PCBs, metals, phthalates, PAHs	Nonferrous scrap metal recycling (Blue Mountain 2009)	Medium	p Medium	p Complete (2011)
Front Ave. MP	Stormwater	Hafley	4008	9.9W	20		None	Current use is parking lot. NFA in 2004	Low	Low	Complete (2004)

Table 20. AOPC 20: Status of Adjacent or Immediately Upstream Current Ongoing and Potentially Ongoing Upland and Overwater Sources [a]

Site Name	Potential Contaminant Migration Pathway	DEQ PM	ECSI #	River Mile	AOPC	AOPC COIs	Upland and Overwater COIs	Potential Upland and Overwater Sources	DEQ Site Priority Level	DEQ Pathway Priority Level	Status of SCE
Guilds Lake	Stormwater	Cameron	404	9.4W	20		None	Site remediated in 1995 and is currently warehouses and parking lots.	Low	Low	Complete (1990 RI)
Nudelman & Sons	Stormwater	Unassigned	966	9.3W	20		NS	Recycling operations, potential landfill and oil spill, poor management of hazardous wastes			

Notes: See last page of table for full list of footnotes.

OF17	Stormwater	Tarnow	2425	9.7W	20		PCBs, zinc (City of Portland, 2003)	**Current:** About 205 heavy industrial acres, 5 acres light industrial acres, 55 residential acres and 4 major transportation acres. See below for identified sources. **Future:** Almost all industrial properties will be diverted to tunnel in 2011; remaining basin will be primarily open space and residential.	Medium	p Medium	p Complete (2004)
Galvanizers	Stormwater	Orr	1196	9.6W	20		PAHs, TPH, metals, phthalates	Zinc galvanizing operation since 1940s; some storage of process chemicals, and hazardous and non-hazardous wastes	TBD	TBD	Ongoing (anticipated 4th Qtr. 2010)
Galvanizers	Groundwater Infiltration/ City Storm Sewer[g]					**Metals** (Cd, Cu, Pb, Hg, Zn)	Metals, TPH		TBD	TBD	Ongoing (anticipated 4th Qtr. 2010)

Table 20. AOPC 20: Status of Adjacent or Immediately Upstream Current Ongoing and Potentially Ongoing Upland and Overwater Sources [a]

Site Name	Potential Contaminant Migration Pathway	DEQ PM	ECSI #	River Mile	AOPC	AOPC COIs	Upland and Overwater COIs	Potential Upland and Overwater Sources	DEQ Site Priority Level	DEQ Pathway Priority Level	Status of SCE
GE Decommissioning	Stormwater	Gainer	4003	9.5W	20	**Metals** (Cd, Cu, Pb, Hg, Zn), **total low PAHs**, **BnOH**, **total PCBs**, **total TEQ**, **pesticides** (4,4'-DDT, total DDx)	PAHs, TPH, PCBs, metals	Former equipment handling and pressure washing areas, report of subsurface oil in storage yard, former transformer pit outlet drain, catch basins and storm drains	Medium	Medium	Complete (February 2006)
GE Decommissioning	Groundwater Infiltration/ City Storm Sewer						PCBs			p Low	Ongoing (completion pending confirmation of City re-routing flow to treatment)
Portland Terminal Railroad (aka Guilds Lake RR Yard)	Stormwater	Orr	100	9.0W	20		VOCs, SVOCs, PAHs, TPH, PCBs, metals, phthalates	Railroad switching yard	p Low	TBD	Ongoing (anticipated 4th Qtr. 2010)
Mogul Corp.	Stormwater	Unassigned	1307	9.5W	20		None	Production of water treatment chemicals			
Paco Pumps	Stormwater	Roick	146	9.6W	20		None	Site redeveloped in 2007. Currently a winery and retail space	Low	Low	Complete (2007)
GE - NW 28th	Stormwater	NA	TSCA site	10W	20		PCBs	Former commerical PCB storage facility			

Notes: See last page of table for full list of footnotes.

King-Ries Property	Stormwater	Pugh	4560	10.2W	20		None	Site NFA in 2006. Former metal working operations, a valve-testing pit (in-filled with concrete), a small drain on the south side of the first floor, and possibly former USTs	Low	Low	Complete (2006)
Mercer Industries	Stormwater	Wistar	144	10.2W	20		None	Former etching facility and wastewater treatment tanks			

Table 20. AOPC 20: Status of Adjacent or Immediately Upstream Current Ongoing and Potentially Ongoing Upland and Overwater Sources [a]

Site Name	Potential Contaminant Migration Pathway	DEQ PM	ECSI #	River Mile	AOPC	AOPC COIs	Upland and Overwater COIs	Potential Upland and Overwater Sources	DEQ Site Priority Level	DEQ Pathway Priority Level	Status of SCE
AM Machine	Stormwater	Unassigned	2261	10.1W	20	**Metals** (Cd, Cu, Pb, Hg, Zn), **total low PAHs**, **BnOH**, **total PCBs**, **total TEQ**, **pesticides** (4,4'-DDT, total DDx)	None	Petroleum-impacted subsurface soils			
SFI	Stormwater	Harman	5103	10W	20		PCBs, TPH, phthalates, metals	Former metal working and forge hammering operations; former transormer vault (This is a portion of the Schmitt Forge ECSI site)	Low	Low	Complete (2009)
Schmitt Forge	Stormwater	Unassigned	1347	10.2W	20		TPH	Former industrial steel foundary			

Notes:

[a] The information contained in this table is based on information obtained by LWG from correspondence with DEQ project managers and from reports in DEQ files as of ____ 2010. Information on sites upriver of RM 11 and sites within the s in the form of 104(e) information requests, and this is not a final list of sources that may be impacting the Study Area.

[b] SCE = Source Control Evaluation. This is the first step in DEQ's source evaluation process. The status of an SCE is either complete, ongoing, not started, TBD, or NA (for a pathway that is not applicable).

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[d] SCM = Source Control Measures. The final step in the source evaluation process; the implementation status of the SCMs is either complete, ongoing, not started, TBD, or NA.

[e] Adjacent sites are those with potential sources/pathways that are immediately adjacent to the reference AOPC, and upstream sites are those potential sources/pathways that are upstream of the reference AOPC and not reference with any other

[f] This pathway is included for ECSI sites that have groundwater infiltration into the City storm sewer. For sites without this pathway, assume there is no groundwater infiltration into the City storm sewer.

p = DEQ's preliminary pathway determination
? = Unknown, typically due to lack of sampling information
Italicized cells indicate upland sites within current or former CSO basins. Non-italicized text indicates upland sites within stormwater basins.
Grey shading indicates shared conveyances.

Reference Citations:

AMEC. 2007. Closure Plan, Revised June 2006, Addendum No. 2, GE Energy Services Commercial PCB Storage Facility. AMEC Earth & Environmental Inc., Portland, OR.
Anchor QEA. 2008. Expanded Preliminary Assessment Monitoring Report, Galvanizers Company, Portland, OR. Anchor Environmental LLC, Portland, OR. January 2008
Blue Mountain. 2009. Stormwater Catch Basins Sediment Sampling Report. Prepared for Calbag Metals Company, Portland, OR. Blue Mountain Environmental Consulting Inc., Richland, WA, in association with GeoPro Geologic Services
City of Portland. 2003. City of Portland / Outfall 17 / Contaminated Sediment Source Identification. City of Portland, OR June 2003.
City of Portland. 2010. Stormwater Evaluation Report, City of Portland Outfall Project, ECSI 2425. City of Portland, OR. February 2010.
Creekside. 2004. Environmental Investigation Report, Catch Basin Cleanout and Sump Decommissioning for Property Located at 3445 NW Front Ave. Creekside Environmental Consulting, LLC, Tualatin, OR. April 2004
DEQ. 2009. Portland Harbor Joint Source Control Strategy - Milestone Report. Prepared by the Oregon Department of Environmental Quality, Portland, OR. December 2009.
GeoDesign. 2008. Stormwater System Remedial Work Plan, SFI Property, Portland, OR. Prepared for the Oregon Department of Environmental Quality, Portland, OR. GeoDesign Inc., Portland, OR. November 18, 2008.

Acronyms:

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AOPC = area of potential concern
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AST = aboveground storage tank
BEHP = bis-2-(ethylhexyl) phthalate
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NFA = no further action
NPDES = National Pollutant Discharge Elimination System
NS = no sampling of upland COIs reported. For stormwater/wastewater, no sampling beyond permit requirements reported.
ODOT = Oregon Department Of Transportation
OERS = Oregon Emergency Response System
PAH = polycyclic aromatic hydrocarbon
PCB = polyclorinated biphenyl
PM = project manager

Table 20. AOPC 20: Status of Adjacent or Immediately Upstream Current Ongoing and Potentially Ongoing Upland and Overwater Sources [a]

Site Name	Potential Contaminant Migration Pathway	DEQ PM	ECSI #	River Mile	AOPC	AOPC COIs	Upland and Overwater COIs	Potential Upland and Overwater Sources	DEQ Site Priority Level	DEQ Pathway Priority Level	Status of SCE

ECSI = Environmental Cleanup Site Inventory
EE/CA = engineering evaluation/cost analysis
EIB = in situ bioremediation
EPA = Environmental Protection Agency
FS = feasibility study
GRH = gasoline-range hydrocarbon
GW = groundwater
JSCS = Joint Source Control Strategy
POTW = publicly owned treatment works
PPA = Prospective Purchaser Agreement
RI = remedial investigation
ROD = record of decision
RP = responsible party
SVOC = semivolatile organic compound
SW = stormwater
SWPCP = stormwater pollution control plan

Table 20. AOPC 20: Status of Adjacent or Immediatel

Site Name	Potential Contaminant Migration Pathway	SCE [b]		SCM Selection [d]			SCM Implementation and Effectiveness			
		SCD [c]	SCE Findings and Next Steps	Status of SCM Selection	SCD	Next Steps and Schedule	Status of SCM Implementation and Effectiveness	SCD	Next Steps and Schedule	Post-Construction Monitoring Results
Sources Adjacent to AOPC 20 [e]										
POP Terminal 2	Groundwater	Insignificant pathway	No actions recommended, no SCMs needed	NA	NA	NA	NA	NA	NA	NA
POP Terminal 2	Stormwater	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
POP Terminal 2	Overwater	No known current sources (spills reported to OERS)	NA	NA	NA	NA	NA	NA	NA	NA
POP Terminal 2	Overland Transport	NA	NA	NA	NA	NA	NA	NA	NA	NA
POP Terminal 2	Bank Erosion	NA	NA	NA	NA	NA	NA	NA	NA	NA
Shared Conveyance Systems										
OF16	Stormwater	p Complete Pathway	Source tracing indicates one current primary source. Site has entered DEQ Cleanup Program (see below).	Ongoing	BMP implementation through three 1200Z permits. One property implemented treatment per Stormwater Manual requirements. Targeted line cleaning. Onsite SCMs being implemented at ECSI sites (see below).	Once sites have completed SCEs, City will prepare RI/SCM document	Continue City MS4 and watershed SC programs to improve stormwater quality	TBD	TBD	TBD
Calbag - Nicolai	Stormwater	p Complete Pathway	Storm solids and asphalt/concrete sampling. Complete stormwater pathway evaluation.	Ongoing	TBD	TBD	TBD	TBD	TBD	TBD
Front Ave. MP	Stormwater	Insignificant Pathway	?	Catch basin and storm line cleaned and connected to City storm system per State Code.	NFA in 2004	NA	NA	NA	NA	NA

Table 20. AOPC 20: Status of Adjacent or Immediatel

Site Name	Potential Contaminant Migration Pathway	SCE [b]		SCM Selection [d]			SCM Implementation and Effectiveness			
		SCD [c]	SCE Findings and Next Steps	Status of SCM Selection	SCD	Next Steps and Schedule	Status of SCM Implementation and Effectiveness	SCD	Next Steps and Schedule	Post-Construction Monitoring Results
Guilds Lake	Stormwater	Incomplete Pathway	Site stormwater discharged to dry wells	Complete (1990 FS)	ROD in 1991	Site regrading and capping, decommissioning of infiltration basins, and installation of a storm system.	Site remediation completed in 1995	Certification of Completion in 1998	NA	NA
Nudelman & Sons	Stormwater	Not tracked in Milestone Report (additional info requested]								

Notes: See last page of table for full list of footnotes.

OF17	Stormwater	p Complete Pathway (current), future basin to be evaluated	Interim SCMs before diversion (line cleaning and abandonment). Onsite SCMs being implemented at ECSI/TSCA sites (see below)	Ongoing (see below)	Almost all industrial stormwater will be diverted to the tunnel in 2011. One site (PTRR) downstream of the diversion is addressing stormwater through DEQ Cleanup program	TBD	TBD	TBD	TBD	TBD
Galvanizers	Stormwater	Complete Pathway	Soil removal, storm system cleaning and reconfiguration. Evaluate treatment options. Complete stormwater pathway evaluation.	Focused feasibility study. SW treatment installed.	Interim SCMs include BMPs (yard sweeping, catch basin filter inserts), yard paving/sealing, improving operations, and reducing connections to City lines	Proposed connection to City combined system that will be diverted to tunnel in 2011	Final stormwater SCMs implemented. Post-SCM stormwater monitoring underway.	TBD	Site stormwater to be diverted to tunnel in 2011	TBD
Galvanizers	Groundwater Infiltration/ City Storm Sewer[g]	Complete Pathway	Evaluate preferential groundwater pathway.	TBD	TBD	TBD	TBD	TBD	TBD	TBD

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Site Name	Potential Contaminant Migration Pathway	SCE [b]		SCM Selection [d]			SCM Implementation and Effectiveness			
		SCD [c]	SCE Findings and Next Steps	Status of SCM Selection	SCD	Next Steps and Schedule	Status of SCM Implementation and Effectiveness	SCD	Next Steps and Schedule	Post-Construction Monitoring Results
GE Decommissioning	Stormwater	Complete Pathway	PCBs in surface and subsurface soils, storm system, and groundwater	Completed	Removal of PCB contaminated sediment from onsite catch basins and pipes, new CBs/filters, stormwater treatment, new pipes, pipe lining, paving	TBD	11/25/08 Post-SCM monitoring completed	Complete, with on-going operation of stormwater treatment	Site stormwater to be diverted to tunnel in 2011	TBD
GE Decommissioning	Groundwater Infiltration/ City Storm Sewer	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
Portland Terminal Railroad (aka Guilds Lake RR Yard)	Stormwater	TBD	Complete stormwwater pathway evaluation	Ongoing	TBD	TBD	TBD	TBD	TBD	TBD
Mogul Corp.	Stormwater	Not tracked in Milestone Report. No hazardous waste found at site. Site stormwater to be diverted to tunnel in 2011 NFA (2002)								
Paco Pumps	Stormwater	Incomplete Pathway	Legacy solids in storm lines to be investigated	Lines cleaned and replaced. Contaminated soils capped under redevelopment.	SCD in 2007	NA	NA	NA	Site stormwater to be diverted to tunnel in 2011	NA
GE - NW 28th	Stormwater	Not tracked inMilestone Report. Elevated PCBs detected in catch basin solids (AMEC 2007). Formal stormwater pathway evaluation not conducted under TSCA. Site stormwater to be diverted to tunnel in 2011								

Notes: See last page of table for full list of footnotes.

King-Ries Property	Stormwater	Complete Pathway	Metals and PCB in catch basins. Clean out site catch basins and storm lines.	Complete (2006)	Conditional NFA in 2006	NA	NA	NA	Site stormwater to be diverted to tunnel in 2011	NA
Mercer Industries	Stormwater	Not tracked in Milestone Report. Site stormwater to be diverted to tunnel in 2011. NFA (1995) found that contaminants had not leached into the environment.								

Table 20. AOPC 20: Status of Adjacent or Immediatel

Site Name	Potential Contaminant Migration Pathway	SCE [b]		SCM Selection [d]			SCM Implementation and Effectiveness			
		SCD [c]	SCE Findings and Next Steps	Status of SCM Selection	SCD	Next Steps and Schedule	Status of SCM Implementation and Effectiveness	SCD	Next Steps and Schedule	Post-Construction Monitoring Results
AM Machine	Stormwater	Not tracked in Milestone Report. Contamination subsurface. NFA (1999) concluded no exposure. Site stormwater to be diverted to tunnel in 2011.								
SFI	Stormwater	Complete Pathway	Cleanout of catch basins and some site storm lines, and pavement sweeping	Complete (NFA 2010)	Effectiveness of BMPs uncertain. All stormwater from site will be diverted to tunnel in 2011			Conditional NFA issued 6-14-10	Site stormwater to be diverted to tunnel in 2011	
Schmitt Forge	Stormwater	Not tracked in Milestone Report. Site stormwater to be diverted to tunnel in 2011 NFA (1993) [NFA did not likely address stormwater so this may not be relevant]								

Notes:

[a] The information contained in this table is based on info shared stormwater conveyance systems is from RI Table 4.4-4 and from the DEQ ECSI database. Please note that source inventory is an ongoing process by DEQ and EPA, in the form of 104(e) information requests, and this is nc

[b] SCE = Source Control Evaluation. This is the first step

[c] SCD = Source Control Decision. DEQ provides EPA æ Milestone Report.

[d] SCM = Source Control Measures. The final step in the

[e] Adjacent sites are those with potential sources/pathwayAOPC.

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TBT - tributyl tin
TCE = trichloroethene
TPH = total petroleum hydrocarbon
UIC = underground injection control
UST = underground storage tank
VOC = volatile organic compound
XPA = expanded preliminary assessment

Table 20. AOPC 20: Status of Adjacent or Immediatel

Site Name	Potential Contaminant Migration Pathway	SCE [b]		SCM Selection [d]			SCM Implementation and Effectiveness			
		SCD [c]	SCE Findings and Next Steps	Status of SCM Selection	SCD	Next Steps and Schedule	Status of SCM Implementation and Effectiveness	SCD	Next Steps and Schedule	Post-Construction Monitoring Results

ECSI = Environmental Cleanup Site Inventory
EE/CA = engineering evaluation/cost analysis
EIB = in situ bioremediation
EPA = Environmental Protection Agency
FS = feasibility study
GRH = gasoline-range hydrocarbon
GW = groundwater
JSCS = Joint Source Control Strategy

Table 21. AOPC 21: Status of Adjacent or Immediately Upstream Current Ongoing and Potentially Ongoing Upland and Overwater Sources [a]

Site Name	Potential Contaminant Migration Pathway	DEQ PM	ECSI #	River Mile	AOPC	AOPC COIs	Upland and Overwater COIs	Potential Upland and Overwater Sources	DEQ Site Priority Level	DEQ Pathway Priority Level	Status of SCE
Sources Adjacent to AOPC 21 [e]											
Cascade General (Portland Shipyard)	Groundwater - N Channel Ave Fab Area - Operable Unit 2	Lacey	271	8.4E	21	**Metals** (Cd, Hg)**, total PCBs**	VOCs, metals, PAHs	Impacts to soil/riverbank from historical operations such as electrical substations, module fabrication/painting, and sandblast grit storage.	p Medium	p Low	Complete (April 2010)
Cascade General (Portland Shipyard)	Stormwater - N Channel Ave Fab Area - Operable Unit 2						Metals, phthalates, PAHs, TPH			p Medium	Complete (April 2010)
Cascade General (Portland Shipyard)	Overwater Activities - N Channel Ave Fab Area - Operable Unit 2						NA			None	NA
Cascade General (Portland Shipyard)	Overland Transport - N Channel Ave Fab Area - Operable Unit 2						NS			p Medium	Complete (April 2010)
Cascade General (Portland Shipyard)	Bank Erosion - N Channel Ave Fab Area - Operable Unit 2						NS			p Medium	Complete (April 2010)
Upstream Shared Conveyance Systems											

Table 21. AOPC 21: Status of Adjacent or Immediately Upstream Current Ongoing and Potentially Ongoing Upland and Overwater Sources [a]

Site Name	Potential Contaminant Migration Pathway	DEQ PM	ECSI #	River Mile	AOPC	AOPC COIs	Upland and Overwater COIs	Potential Upland and Overwater Sources	DEQ Site Priority Level	DEQ Pathway Priority Level	Status of SCE
OFS-5	Stormwater	Tarnow	2425	9.3E	21	**Metals** (Cd, Hg)**, total PCBs**	None (City of Portland 2010)	Drains 39 acres of light industry. No ECSI sites have been identified in this basin.	Low	p Low	p Complete (2010)

Notes: See last page of table for full list of footnotes.

Table 21. AOPC 21: Status of Adjacent or Immediately Upstream Current Ongoing and Potentially Ongoing Upland and Overwater Sources [a]

Site Name	Potential Contaminant Migration Pathway	DEQ PM	ECSI #	River Mile	AOPC	AOPC COIs	Upland and Overwater COIs	Potential Upland and Overwater Sources	DEQ Site Priority Level	DEQ Pathway Priority Level	Status of SCE

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p = DEQ's preliminary pathway determination
? = Unknown, typically due to lack of sampling information
Italicized cells indicate upland sites within current or former CSO basins. Non-italicized text indicates upland sites within stormwater basins.
Grey shading indicates shared conveyances.

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EPA = Environmental Protection Agency
FS = feasibility study
GRH = gasoline-range hydrocarbon
GW = groundwater
JSCS = Joint Source Control Strategy
MS4 = municipal separate storm sewer systems
NA = not applicable
NAPL = non-aqueous phase liquid
NFA = no further action
NPDES = National Pollutant Discharge Elimination System
NS = no sampling of upland COIs reported. For stormwater/wastewater, no sampling beyond permit requirements reported.
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PCB = polyclorinated biphenyl
PM = project manager
POTW = publicly owned treatment works
PPA = Prospective Purchaser Agreement
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ROD = record of decision
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SVOC = semivolatile organic compound
SW = stormwater
SWPCP = stormwater pollution control plan
TBT - tributyl tin
TCE = trichloroethene
TPH = total petroleum hydrocarbon
UIC = underground injection control
UST = underground storage tank
VOC = volatile organic compound
XPA = expanded preliminary assessment

Table 21. AOPC 21: Status of Adjacent or Immediatel

Site Name	Potential Contaminant Migration Pathway	SCE [b]		SCM Selection [d]			SCM Implementation and Effectiveness			
		SCD c	SCE Findings and Next Steps	Status of SCM Selection	SCD	Next Steps and Schedule	Status of SCM Implementation and Effectiveness	SCD	Next Steps and Schedule	Post-Construction Monitoring Results
Sources Adjacent to AOPC 21 [e]										
Cascade General (Portland Shipyard)	Groundwater - N Channel Ave Fab Area - Operable Unit 2	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
Cascade General (Portland Shipyard)	Stormwater - N Channel Ave Fab Area - Operable Unit 2	TBD	TBD	TBD	TBD	TBD	TBD	Historical storm water pipes abandoned August 2006 and October 2008	TBD	TBD
Cascade General (Portland Shipyard)	Overwater Activities - N Channel Ave Fab Area - Operable Unit 2	No known current sources (spills will be reported to OERS)	NA	NA	NA	NA	NA	NA	NA	NA
Cascade General (Portland Shipyard)	Overland Transport - N Channel Ave Fab Area - Operable Unit 2	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
Cascade General (Portland Shipyard)	Bank Erosion - N Channel Ave Fab Area - Operable Unit 2	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
Upstream Shared Conveyance Systems										

Table 21. AOPC 21: Status of Adjacent or Immediatel

Site Name	Potential Contaminant Migration Pathway	SCE [b]		SCM Selection [d]			SCM Implementation and Effectiveness			
		SCD c	SCE Findings and Next Steps	Status of SCM Selection	SCD	Next Steps and Schedule	Status of SCM Implementation and Effectiveness	SCD	Next Steps and Schedule	Post-Construction Monitoring Results
OFS-5	Stormwater	p Insignificant Pathway	BMP implementation through one 1200Z permit. Four properties implemented treatment per Stormwater Manual requirements. Stormwater data confirms insignificant contaminant pathway. Continue City MS4 and watershed SC programs. SCE to be submitted to DEQ.	TBD	TBD	TBD	TBD	TBD	TBD	TBD

Notes: See last page of table for full list of footnotes.

Table 21. AOPC 21: Status of Adjacent or Immediatel

Site Name	Potential Contaminant Migration Pathway	SCE [b]		SCM Selection [d]			SCM Implementation and Effectiveness			
		SCD c	SCE Findings and Next Steps	Status of SCM Selection	SCD	Next Steps and Schedule	Status of SCM Implementation and Effectiveness	SCD	Next Steps and Schedule	Post-Construction Monitoring Results

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EPA = Environmental Protection Agency
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GRH = gasoline-range hydrocarbon
GW = groundwater
JSCS = Joint Source Control Strategy
MS4 = municipal separate storm sewer systems
NA = not applicable
NAPL = non-aqueous phase liquid
NFA = no further action

Table 22. AOPC 22: Status of Adjacent or Immediately Upstream Current Ongoing and Potentially Ongoing Upland and Overwater Sources [a]

Site Name	Potential Contaminant Migration Pathway	DEQ PM	ECSI #	River Mile	AOPC	AOPC COIs	Upland and Overwater COIs	Potential Upland and Overwater Sources	DEQ Site Priority Level	DEQ Pathway Priority Level	Status of SCE
Sources Adjacent to AOPC 22 [e]											
No ECSI sites are located within this AOPC.				9E	22	**Metals** (Cu, Pb, Zn) **BnOH**, **Total PCBs**					
Sources Upstream of AOPC 22 [e]											
Ashgrove Cement (formerly Goldendale Aluminum)	See AOPC #23	Gainer	2440								

Notes:

[a] The information contained in this table is based on information obtained by LWG from correspondence with DEQ project managers and from reports in DEQ files as of ____ 2010. Information on sites upriver of RM 11 and sites within the s
EPA, in the form of 104(e) information requests, and this is not a final list of sources that may be impacting the Study Area.

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[d] SCM = Source Control Measures. The final step in the source evaluation process; the implementation status of the SCMs is either complete, ongoing, not started, TBD, or NA.

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[f] This pathway is included for ECSI sites that have groundwater infiltration into the City storm sewer. For sites without this pathway, assume there is no groundwater infiltration into the City storm sewer.

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GRH = gasoline-range hydrocarbon
GW = groundwater
NPDES = National Pollutant Discharge Elimination System
NS = no sampling of upland COIs reported. For stormwater/wastewater, no sampling beyond permit requirements reported.
ODOT = Oregon Department Of Transportation
OERS = Oregon Emergency Response System
PAH = polycyclic aromatic hydrocarbon
PCB = polyclorinated biphenyl
PM = project manager
POTW = publicly owned treatment works
PPA = Prospective Purchaser Agreement
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SW = stormwater
SWPCP = stormwater pollution control plan
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Site Name	Potential Contaminant Migration Pathway	DEQ PM	ECSI #	River Mile	AOPC	AOPC COIs	Upland and Overwater COIs	Potential Upland and Overwater Sources	DEQ Site Priority Level	DEQ Pathway Priority Level	Status of SCE

JSCS = Joint Source Control Strategy
MS4 = municipal separate storm sewer systems
NA = not applicable
NAPL = non-aqueous phase liquid
NFA = no further action
UIC = underground injection control
UST = underground storage tank
VOC = volatile organic compound
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Table 22. AOPC 22: Status of Adjacent or Immediatel

Site Name	Potential Contaminant Migration Pathway	SCE [b]		SCM Selection [d]			SCM Implementation and Effectiveness			
		SCD [c]	SCE Findings and Next Steps	Status of SCM Selection	SCD	Next Steps and Schedule	Status of SCM Implementation and Effectiveness	SCD	Next Steps and Schedule	Post-Construction Monitoring Results
Sources Adjacent to AOPC 22 [e]										
No ECSI sites are located within this AOPC.										
Sources Upstream of AOPC 22 [e]										
Ashgrove Cement (formerly Goldendale Aluminum)	See AOPC #23									

Notes:

[a] The information contained in this table is based on info shared stormwater conveyance systems is from RI Table 4.4-4 and from the DEQ ECSI database. Please note that source inventory is an ongoing process by DEQ and EPA, in the form of 104(e) information requests, and thi

[b] SCE = Source Control Evaluation. This is the first step

[c] SCD = Source Control Decision. DEQ provides EPA æ Milestone Report.

[d] SCM = Source Control Measures. The final step in the

[e] Adjacent sites are those with potential sources/pathway AOPC.

[f] This pathway is included for ECSI sites that have groun

p = DEQ's preliminary pathway determination
? = Unknown, typically due to lack of sampling informa
Italicized cells indicate upland sites within current or fo
Grey shading indicates shared conveyances.

Reference Citations:

DEQ. 2009. Portland Harbor Joint Source Control Stra

Acronyms:

AOC = Administrative Order of Consent
AOPC = area of potential concern
AS/SVE = air sparging/soil vapor extraction
AST = aboveground storage tank
BEHP = bis-2-(ethylhexyl) phthalate
BMP = best management practices
BnOH = benzyl alcohol
COI = chemical of interest
CSO = combined sewer overflow
DEQ = Oregon Department Of Environmental Quality
DNAPL = dense non-aqueous phase liquid
ECSI = Environmental Cleanup Site Inventory
EE/CA = engineering evaluation/cost analysis
EIB = in situ bioremediation
EPA = Environmental Protection Agency
FS = feasibility study
GRH = gasoline-range hydrocarbon
GW = groundwater

Table 22. AOPC 22: Status of Adjacent or Immediatel

		SCE [b]		SCM Selection [d]			SCM Implementation and Effectiveness			
Site Name	Potential Contaminant Migration Pathway	SCD [c]	SCE Findings and Next Steps	Status of SCM Selection	SCD	Next Steps and Schedule	Status of SCM Implementation and Effectiveness	SCD	Next Steps and Schedule	Post-Construction Monitoring Results

JSCS = Joint Source Control Strategy
MS4 = municipal separate storm sewer systems
NA = not applicable
NAPL = non-aqueous phase liquid
NFA = no further action

Table 23. AOPC 23: Status of Adjacent or Immediately Upstream Current Ongoing and Potentially Ongoing Upland and Overwater Sources [a]

Site Name	Potential Contaminant Migration Pathway	DEQ PM	ECSI #	River Mile	AOPC	AOPC COIs	Upland and Overwater COIs	Potential Upland and Overwater Sources	DEQ Site Priority Level	DEQ Pathway Priority Level	Status of SCE
Sources Adjacent to AOPC 23 [e]											
Ashgrove Cement (formerly Goldendale Aluminum)	Groundwater	Gainer	2440	10.3E	23	**Metals** (Cd, Cu, Pb, Hg, Zn), **total PCBs**, **pesticides** (4,4'-DDT, total DDx)	NA	Former alumina and pitch handling operations, ASTs, former USTs, storage buildings, transformers, outfalls, overland runoff areas, historical grain shipment facility, dock operations and spills	NFA, Low	Low	Complete (July 2001)
Ashgrove Cement (formerly Goldendale Aluminum)	Stormwater						PAHs, TPH, metals			Low	Complete (July 2001)
Ashgrove Cement (formerly Goldendale Aluminum)	Overwater						PAHs, TPH, metals			None	NA
Ashgrove Cement (formerly Goldendale Aluminum)	Overland Transport						VOCs, SVOCs, PAHs, TPH, metals			Low	Complete (July 2001)
Ashgrove Cement (formerly Goldendale Aluminum)	Bank Erosion						Not sampled			None	NA
Shared Conveyance Systems											
OF47	Stormwater	Tarnow	2425	9.9E	23	**Metals** (Cd, Cu, Pb, Hg, Zn), **total PCBs**, **pesticides** (4,4'-DDT, total DDx)	None (City of Portland 2010)	Drains 9.5 acres light industry in stormwater basin. Outfall includes CSO basin that was controlled in 2006. No ECSI sites in current stormwater basin.	Low	p Low	p Complete (2010)
UPRR Albina Railroad	Stormwater	Romero	178	10.3E	23		PAHs, TPH, metals	Rail car classification yard, rail yard vehicle parking (limited stormwater discharge from these areas)	p Low	TBD	Ongoing (draft SCE submitted to DEQ in August 2008. Revised SCE to be submitted in Fall 2010)
Elks Cleaners	Stormwater	Pugh	4954	10E	23		VOCs	Dry cleaner releases to shallow soil	Not tracked in Milestone Report. [According to E		
Sunny's Dry Cleaners	Stormwater	Unassigned	2848	10E	23		None reported	No information provided in ECSI	Not trac		

Table 23. AOPC 23: Status of Adjacent or Immediately Upstream Current Ongoing and Potentially Ongoing Upland and Overwater Sources [a]

Site Name	Potential Contaminant Migration Pathway	DEQ PM	ECSI #	River Mile	AOPC	AOPC COIs	Upland and Overwater COIs	Potential Upland and Overwater Sources	DEQ Site Priority Level	DEQ Pathway Priority Level	Status of SCE
Upstream Shared Conveyance Systems											
OF46	Stormwater	Tarnow	2425	10.5E	24	**Metals** (Cu, Pb, Hg), **total PCBs**	Total PAHs, copper (City of Portland 2010)	Current: Drains 26 acres industrial, 14 acres residential, and 2 acres major transportation. See below for identified sources. Future: All stormwater will be diverted to the tunnel in 2011	Low	p Low	p Complete (2010)

Notes: See last page of table for full list of footnotes.

UPRR Albina Railroad	Stormwater	Romero	178	10.3E	23	**Metals** (Cu, Pb, Hg), **total PCBs**	PAHs, TPH, metals	Portion of site that discharges to OF46 is vacant pavement beginning September 2009	Low	p Low	Draft Supplemental RI/SCE Submitted Aug 2008. Final RI/SCE Ongoing (anticipated Fall 2010)
Industrial Battery Bldg	Stormwater	Morgenstern	935	10.6E	24		None	Site currently vacant, unpaved and vegetated.			
Abraham's Fabric Clinic	Stormwater	Unassigned	4592	10.9E	24		None reported	No information is provided in ECSI			
Betty Campbell Bldg.	Stormwater	Anderson	1902	10.5E	24		None	Sites was remediated and redeveloped in 1996. No information is provided in ECSI on former use			
Flowers by Victor	Stormwater	Greenburg	4712	10E	24		None?	Suspected pesticide release through regular product use in greenhouse operations			
Grant Warehouse	Stormwater	Greenburg	2385	11.3E	24		None	Current site is vacant and unpaved. Former contaminated warehouse has been removed			Not tracked in
Henry Wong	Stormwater	Unassigned	989	10.4E	24		None reported	Suspected dumping of paint and paint thinners (DEQ 2009a)			
McCann/Lenske Property	Stormwater	Greenburg	4711	11.3E	24		None	Current site is vacant and unpaved. Former battery manufacturing facility building demolished about 2006			

Table 23. AOPC 23: Status of Adjacent or Immediately Upstream Current Ongoing and Potentially Ongoing Upland and Overwater Sources [a]

Site Name	Potential Contaminant Migration Pathway	DEQ PM	ECSI #	River Mile	AOPC	AOPC COIs	Upland and Overwater COIs	Potential Upland and Overwater Sources	DEQ Site Priority Level	DEQ Pathway Priority Level	Status of SCE
North Portland Bible College	Stormwater	Larsen	4354	10.4E	24		None	Current site is vacant and unpaved (since 1983). Former gas station and auto detailing shop, former USTs			NI
Numberg Scientific Co.	Stormwater	Kiernan	87	11.2E	24		None	Subsurface contamination. Site has been capped with clean fill since 1969.			
Portland Cleaning Works	Stormwater	Coates	3529	10.9E	24		None	Former dry cleaning business (DEQ 2009a)			
PP&L Mason Station	Stormwater	Voss	2136	10.5E	24		None	Site redeveloped by Habitat for Humanity for housing in 2001. Former electrical substation.			
Sources Upstream of AOPC 23 [e]											
UPRR Albina Railroad	Groundwater	Romero	178	10.3E	24	**Metals** (Cu, Pb, Hg), **total PCBs**	PAHs, TPH, metals	Existing and former fueling areas, former locomotive washing area, wastewater treatment plant, freight car repair shop (former paint stripper area, former UST)	p Low	Low	Draft Supplemental RI/SCE Submitted Aug 2008. Final RI/SCE Ongoing (anticipated Fall 2010)

Notes: See last page of table for full list of footnotes.

Table 23. AOPC 23: Status of Adjacent or Immediately Upstream Current Ongoing and Potentially Ongoing Upland and Overwater Sources [a]

Site Name	Potential Contaminant Migration Pathway	DEQ PM	ECSI #	River Mile	AOPC	AOPC COIs	Upland and Overwater COIs	Potential Upland and Overwater Sources	DEQ Site Priority Level	DEQ Pathway Priority Level	Status of SCE
UPRR Albina Railroad	Stormwater	Romero	178	10.3E	24	**Metals** (Cu, Pb, Hg), **total PCBs**	PAHs, TPH, PCBs, metals	Existing and former fueling areas, former locomotive washing area, wastewater treatment plant, freight car repair shop (former paint stripper area, former UST)	p Low	TBD	Draft Supplemental RI/SCE Submitted Aug 2008. Final RI/SCE Ongoing (anticipated Fall 2010)
UPRR Albina Railroad	Overwater						NA			None	NA
UPRR Albina Railroad	Overland Transport						NA			None	NA
UPRR Albina Railroad	Bank Erosion	Romero	178	10.3E	24	**Metals** (Cu, Pb, Hg), **total PCBs**	PCBs	Existing and former fueling areas, former locomotive washing area, wastewater treatment plant, freight car repair shop (former paint stripper area, former UST)	p Low	p Low	Draft Supplemental RI/SCE Submitted Aug 2008. Final RI/SCE Ongoing (anticipated Fall 2010)

Notes:

[a] The information contained in this table is based on information obtained by LWG from correspondence with DEQ project managers and from reports in DEQ files as of ____ 2010. Information on sites upriver of RM 11 and sites within the s in the form of 104(e) information requests, and this is not a final list of sources that may be impacting the Study Area.

[b] SCE = Source Control Evaluation. This is the first step in DEQ's source evaluation process. The status of an SCE is either complete, ongoing, not started, TBD, or NA (for a pathway that is not applicable).

[c] SCD = Source Control Decision. DEQ provides EPA and its partners an opportunity to review (but not approve or disapprove) the DEQ SCD; the status of this review is described in the column, Status of EPA Review of SCE Decision, in th

[d] SCM = Source Control Measures. The final step in the source evaluation process; the implementation status of the SCMs is either complete, ongoing, not started, TBD, or NA.

[e] Adjacent sites are those with potential sources/pathways that are immediately adjacent to the reference AOPC, and upstream sites are those potential sources/pathways that are upstream of the reference AOPC and not reference with any other .

[f] This pathway is included for ECSI sites that have groundwater infiltration into the City storm sewer. For sites without this pathway, assume there is no groundwater infiltration into the City storm sewer.

p = DEQ's preliminary pathway determination
? = Unknown, typically due to lack of sampling information
Italicized cells indicate upland sites within current or former CSO basins. Non-italicized text indicates upland sites within stormwater basins.
Grey shading indicates shared conveyances.

Reference Citations:

CH2M Hill. 2008. Supplemental Remedial Investigation/Source Control Measures Evaluation Report. CH2M Hill, Portland, OR. August 2008.
City of Portland. 2010. Stormwater Evaluation Report, City of Portland Outfall Project, ECSI 2425. City of Portland, OR. February 2010.
DEQ. 2009. Portland Harbor Joint Source Control Strategy - Milestone Report. Prepared by the Oregon Department of Environmental Quality, Portland, OR. December 2009.

Acronyms:

Table 23. AOPC 23: Status of Adjacent or Immediately Upstream Current Ongoing and Potentially Ongoing Upland and Overwater Sources [a]

Site Name	Potential Contaminant Migration Pathway	DEQ PM	ECSI #	River Mile	AOPC	AOPC COIs	Upland and Overwater COIs	Potential Upland and Overwater Sources	DEQ Site Priority Level	DEQ Pathway Priority Level	Status of SCE

AOC = Administrative Order of Consent
AOPC = area of potential concern
AS/SVE = air sparging/soil vapor extraction
AST = aboveground storage tank
BEHP = bis-2-(ethylhexyl) phthalate
BMP = best management practices
BnOH = benzyl alcohol
COI = chemical of interest
CSO = combined sewer overflow
DEQ = Oregon Department Of Environmental Quality
DNAPL = dense non-aqueous phase liquid
ECSI = Environmental Cleanup Site Inventory
EE/CA = engineering evaluation/cost analysis
EIB = in situ bioremediation
EPA = Environmental Protection Agency
FS = feasibility study
GRH = gasoline-range hydrocarbon
GW = groundwater
JSCS = Joint Source Control Strategy
MS4 = municipal separate storm sewer systems
NA = not applicable
NAPL = non-aqueous phase liquid
NFA = no further action
NPDES = National Pollutant Discharge Elimination System
NS = no sampling of upland COIs reported. For stormwater/wastewater, no sampling beyond permit requirements reported.
ODOT = Oregon Department Of Transportation
OERS = Oregon Emergency Response System
PAH = polycyclic aromatic hydrocarbon
PCB = polyclorinated biphenyl
PM = project manager
POTW = publicly owned treatment works
PPA = Prospective Purchaser Agreement
RI = remedial investigation
ROD = record of decision
RP = responsible party
SVOC = semivolatile organic compound
SW = stormwater
SWPCP = stormwater pollution control plan
TBT - tributyl tin
TCE = trichloroethene

Table 23. AOPC 23: Status of Adjacent or Immediatel

Site Name	Potential Contaminant Migration Pathway	SCE [b]		SCM Selection [d]			SCM Implementation and Effectiveness			
		SCD [c]	SCE Findings and Next Steps	Status of SCM Selection	SCD	Next Steps and Schedule	Status of SCM Implementation and Effectiveness	SCD	Next Steps and Schedule	Post-Construction Monitoring Results
Sources Adjacent to AOPC 23 [e]										
Ashgrove Cement (formerly Goldendale Aluminum)	Groundwater	Insignificant Pathway	No actions recommended, no SCMs needed	NA	NA	NA	NA	NA	NA	NA
Ashgrove Cement (formerly Goldendale Aluminum)	Stormwater	Insignificant Pathway	No actions recommended, no SCMs needed	NA	NA	NA	NA	NA	NA	NA
Ashgrove Cement (formerly Goldendale Aluminum)	Overwater	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ashgrove Cement (formerly Goldendale Aluminum)	Overland Transport	Insignificant Pathway	No actions recommended, no SCMs needed	NA	NA	NA	NA	NA	NA	NA
Ashgrove Cement (formerly Goldendale Aluminum)	Bank Erosion	NA	NA	NA	NA	NA	NA	NA	NA	NA
Shared Conveyance Systems										
OF47	Stormwater	p Insignificant Pathway	Most of storm basin diverted to tunnel in 2006; current basin only drains 2 properties. One is monitored under 1200Z and the other was redeveloped under the Stormwater Manual and all stormwater is treated. SCE to be submitted to DEQ.	TBD	TBD	TBD	TBD	TBD	TBD	TBD
UPRR Albina Railroad	Stormwater	TBD	DEQ reviewed SCE and provided comment in January 2010.	Stormwater system clean out and rehabilitation. Stormwater source control BMP's implemented.	TBD	Ongoing Source Control BMPs and Performance Monitoring being implemented.	TBD	TBD	TBD	TBD
Elks Cleaners	Stormwater	[CSI, 2008 sampling at catch basin. Need info on results - one sample of standing water in CB; analyzed for VOCs (EPA Method 8260B) only detected 2.8 ug/L cis-DCE] Located in CSO basin that has been controlled; CSO occurrance very infrequent.								
Sunny's Dry Cleaners	Stormwater	cked in Milestone Report. Light rail investigation in right-of-way adjacent to Site revealed no evidence of contamination in street. Located in CSO basin that has been controlled; CSO occurrance very infrequent.								

Table 23. AOPC 23: Status of Adjacent or Immediatel

Site Name	Potential Contaminant Migration Pathway	SCE [b]		SCM Selection [d]			SCM Implementation and Effectiveness			
		SCD [c]	SCE Findings and Next Steps	Status of SCM Selection	SCD	Next Steps and Schedule	Status of SCM Implementation and Effectiveness	SCD	Next Steps and Schedule	Post-Construction Monitoring Results
Upstream Shared Conveyance Systems										
OF46	Stormwater	p Complete Pathway	Interim SCMs being implemented by sites (see below) until basin is diverted from river.	Ongoing (see below)	All stormwater will be diverted to the tunnel in 2011	NA	NA	NA	NA	NA

Notes: See last page of table for full list of footnotes.

UPRR Albina Railroad	Stormwater	TBD	DEQ reviewed SCE and provided comment in January 2010.	Stormwater system clean out and rehabilitation. System repair completed in October 2009.	TBD	TBD	TBD	TBD	TBD	TBD
Industrial Battery Bldg	Stormwater	Not tracked in Milestone Report. Former contaminated building and soils removed from site in 1994 NFA (1995). Site stormwater to be diverted to tunnel in 2011								
Abraham's Fabric Clinic	Stormwater	Not tracked in Milestone Report. Site stormwater to be diverted to tunnel in 2011 [2006 Remedial action identified in ECSI -Additional info requested]								
Betty Campbell Bldg.	Stormwater	Not tracked in Milestone Report NFA (1996). Site stormwater to be diverted to tunnel in 2011								
Flowers by Victor	Stormwater	Not tracked in Milestone Report NFA (2007). Site stormwater to be diverted to tunnel in 2011								
Grant Warehouse	Stormwater	Milestone Report. EPA-led cleanup included building demolition and soil removal to non-detect or resdiential risk-based concentrations NFA (1995). Site stormwater to be diverted to tunnel in 2011								
Henry Wong	Stormwater	Not tracked in Milestone Report. Site stormwater to be diverted to tunnel in 2011								
McCann/Lenske Property	Stormwater	Not tracked in Milestone Report. Contaminated soil removed from site. NFA (2007) . Site stormwater to be diverted to tunnel in 2011								

Table 23. AOPC 23: Status of Adjacent or Immediatel

Site Name	Potential Contaminant Migration Pathway	SCE [b]		SCM Selection [d]			SCM Implementation and Effectiveness			
		SCD [c]	SCE Findings and Next Steps	Status of SCM Selection	SCD	Next Steps and Schedule	Status of SCM Implementation and Effectiveness	SCD	Next Steps and Schedule	Post-Construction Monitoring Results
North Portland Bible College	Stormwater	Not tracked in Milestone Report. FA (2006) concluded no pathways for environmental and human receptors. Site stormwater to be diverted to tunnel in 2011								
Numberg Scientific Co.	Stormwater	Not tracked in Milestone Report. No stormwater exposure since 1969. NFA (1997). Site stormwater to be diverted to tunnel in 2011								
Portland Cleaning Works	Stormwater	Not tracked in Milestone Report. Contamination associated with subsurface soils and groundwater. Site stormwater to be diverted to tunnel in 2011								
PP&L Mason Station	Stormwater	Not tracked in Milestone Report. PCBs below residential cleanup standard of 1.2 ppm. NFA (1998). Site stormwater to be diverted to tunnel in 2011								
Sources Upstream of AOPC 23 [e]										
UPRR Albina Railroad	Groundwater	TBD	Incomplete pathway. DEQ reviewed SCE and provided comment in January 2010.	TBD	TBD	TBD	TBD	TBD	TBD	TBD

Notes: See last page of table for full list of footnotes.

Table 23. AOPC 23: Status of Adjacent or Immediatel

Site Name	Potential Contaminant Migration Pathway	SCE [b]		SCM Selection [d]			SCM Implementation and Effectiveness			
		SCD [c]	SCE Findings and Next Steps	Status of SCM Selection	SCD	Next Steps and Schedule	Status of SCM Implementation and Effectiveness	SCD	Next Steps and Schedule	Post-Construction Monitoring Results
UPRR Albina Railroad	Stormwater	TBD	DEQ reviewed SCE and provided comment in January 2010.	Stormwater system clean out and rehabilitation. system repairs to stop GW inifiltration and outfalls started 2007 and completed December 2008	TBD	TBD	Stormwater system cleaning and maintenance Stormwater source control BMPs implementation	TBD	Continue to implement source control BMPs	TBD
UPRR Albina Railroad	Overwater	NA	NA	NA	NA	NA	NA	NA	NA	NA
UPRR Albina Railroad	Overland Transport	NA	NA	NA	NA	NA	NA	NA	NA	NA
UPRR Albina Railroad	Bank Erosion	TBD	Incomplete Pathway. DEQ reviewed SCE and provided comment in January 2010.	TBD	TBD	TBD	TBD	TBD	TBD	TBD

Notes:

[a] The information contained in this table is based on info shared stormwater conveyance systems is from RI Table 4.4-4 and from the DEQ ECSI database. Please note that source inventory is an ongoing process by DEQ and EPA, in the form of 104(e) information requests, and this is nc

[b] SCE = Source Control Evaluation. This is the first step

[c] SCD = Source Control Decision. DEQ provides EPA æ Milestone Report.

[d] SCM = Source Control Measures. The final step in the

[e] Adjacent sites are those with potential sources/pathway AOPC.

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Acronyms:

Table 23. AOPC 23: Status of Adjacent or Immediatel

Site Name	Potential Contaminant Migration Pathway	SCE [b]		SCM Selection [d]			SCM Implementation and Effectiveness			
		SCD [c]	SCE Findings and Next Steps	Status of SCM Selection	SCD	Next Steps and Schedule	Status of SCM Implementation and Effectiveness	SCD	Next Steps and Schedule	Post-Construction Monitoring Results

AOC = Administrative Order of Consent
AOPC = area of potential concern
AS/SVE = air sparging/soil vapor extraction
AST = aboveground storage tank
BEHP = bis-2-(ethylhexyl) phthalate
BMP = best management practices
BnOH = benzyl alcohol
COI = chemical of interest
CSO = combined sewer overflow
DEQ = Oregon Department Of Environmental Quality
DNAPL = dense non-aqueous phase liquid
ECSI = Environmental Cleanup Site Inventory
EE/CA = engineering evaluation/cost analysis
EIB = in situ bioremediation
EPA = Environmental Protection Agency
FS = feasibility study
GRH = gasoline-range hydrocarbon
GW = groundwater
JSCS = Joint Source Control Strategy
MS4 = municipal separate storm sewer systems
TPH = total petroleum hydrocarbon
UIC = underground injection control
UST = underground storage tank
VOC = volatile organic compound
XPA = expanded preliminary assessment

Table 24. AOPC 24: Status of Adjacent or Immediately Upstream Current Ongoing and Potentially Ongoing Upland and Overwater Sources [a]

Site Name	Potential Contaminant Migration Pathway	DEQ PM	ECSI #	River Mile	AOPC	AOPC COIs	Upland and Overwater COIs	Potential Upland and Overwater Sources	DEQ Site Priority Level	DEQ Pathway Priority Level	SCE [b]			SCM Selection [d]			SCM Implementation and Effectiveness			
											Status of SCE	SCD [c]	SCE Findings and Next Steps	Status of SCM Selection	SCD	Next Steps and Schedule	Status of SCM Implementation and Effectiveness	SCD	Next Steps and Schedule	Post-Construction Monitoring Results
Sources Adjacent to AOPC 24 [e]																				
Sulzer Pumps	Groundwater	Pugh	1235	10.4W	24	**Metals** (Cu, Pb, Hg), **total PCBs**	VOCs, PAHs, TPH, metals, phthalates	Former and existing USTs, historical sandblasting areas, hazardous waste storage area (including radioisotopes), electrical substations, historical welding and machine operations on piers, metal slag along riverbank	p Medium	p Low	Ongoing (anticipated 1st 4th qtr 2010)	TBD	TBD	Pending	Pending	TBD	TBD	TBD	TBD	TBD
Sulzer Pumps	Stormwater						PAHs, TPH, metals			p Medium	Ongoing (anticipated 1st 4th qtr 2010)	TBD	Complete SCE sampling and reporting	Pending	Pending	TBD	TBD	TBD	TBD	TBD
Sulzer Pumps	Overwater						Metals			None	NA	No known current sources (spills reported to OERS)	NA	NA	NA	NA	NA	NA	NA	NA
Sulzer Pumps	Overland Transport						PCBs			None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sulzer Pumps	Bank Erosion						Metals			p Medium	Ongoing (anticipated 1st 4th qtr 2010)	TBD	TBD	Pending	Pending	TBD	TBD	TBD	TBD	TBD
Sources Upstream of AOPC 24 [e]																				
POP Terminal 1 North	Groundwater	Gainer	3377	10.6W	NA	**Metals** (Cu, Pb, Hg), **total PCBs**	VOCs, PAHs, TPH, metals	Current facility operations.	p Low	p Low	Complete (July 2006)	p Insignficant Pathway	No actions recommended, no SCMs needed	NA	NA	NA	NA	NA	NA	NA
POP Terminal 1 North	Stormwater						TBD			p Low	Ongoing (anticipated 4th Qtr. 2010)	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
POP Terminal 1 North	Overwater						NS			None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
POP Terminal 1 North	Overland Transport						NA			None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
POP Terminal 1 North	Bank Erosion						NA			None	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Upstream Shared Conveyance Systems																				
OF15	Stormwater	Tarnow	2425	10.3W	24	**Metals** (Cu, Pb, Hg), **total PCBs**	TBD	Drains stormwater from 1 acre of an active ECSI Site (see below). Outfall includes CSO basin that was controlled in 2006.	TBD	TBD	Ongoing (SCE being conducted by ECSI Site - see below)	TBD	City diverted all drainage (except a portion of one active ECSI site) to the tunnel in 2006. Since only drainage is from an active ECSI site, all SCMs will be implemented by site through DEQ Cleanup program	TBD	TBD	TBD	TBD	TBD	TBD	TBD
Sulzer Pumps	Stormwater	Pugh	1235	10.4W	24		PAHs, TPH, metals	One acre of former operational building and parking area.	Medium	TBD	Ongoing (anticipated 4th Qtr. 2010)	TBD	Solids and stormwater sampling per JSCS	TBD	TBD	TBD	TBD	TBD	TBD	TBD
PGE Substation E	Stormwater	Gainer	3976	10.4W	24		None	Electrical substation. Former UST	Not tracked in Milestone Report. NFA in 2006. Located in CSO basin that has been controlled; CSO occurance very infrequent											
Consolidated Freightways	Stormwater	Unassigned	32	10.8W	24		None	Line leaks or spill/overspill practices; tank leaks	Not tracked in Milestone Report. Contamination was subsurface and not expected to affect stormwater. Located in CSO basin that has been controlled; CSO occurance very infrequent											
Drew Paints	Stormwater	Waggy	4465	10.8W	24		None	UST releases	Not tracked in Milestone Report. Contamination was subsurface and not expected to affect stormwater. Located in CSO basin that has been controlled; CSO occurance very infrequent											
ESCO Plant #3	Stormwater	Unassigned	112	10.5W	24		None	Steel foundry	Not tracked in Milestone Report. 1980 observation of onsite runoff that may have led to soil contamination. DEQ determined that discharge problem had been corrected . Located in CSO basin that has been controlled; CSO occurance very infrequent											
Groundwater - NW 22nd Ave	Stormwater	Wistar	2015	10.6W	24		None	Low-level VOC groundwater contamination from unknown source(s)	Not tracked in Milestone Report. Contamination is subsurface and not expected to affect stormwater. Located in CSO basin that has been controlled; CSO occurance very infrequent											

Notes: See last page of table for full list of footnotes.

Table 24. AOPC 24: Status of Adjacent or Immediately Upstream Current Ongoing and Potentially Ongoing Upland and Overwater Sources [a]

Notes:

[a] The information contained in this table is based on information obtained by LWG from correspondence with DEQ project managers and from reports in DEQ files as of ____ 2010. Information on sites upriver of RM 11 and sites within the shared stormwater conveyance systems is from RI Table 4.4-4 and from the DEQ ECSI database. Please note that source inventory is an ongoing process by DEQ and EPA, in the form of 104(e) information requests, and this is not a final list of sources that may be impacting the Study Area.

[b] SCE = Source Control Evaluation. This is the first step in DEQ's source evaluation process. The status of an SCE is either complete, ongoing, not started, TBD, or NA (for a pathway that is not applicable).

[c] SCD = Source Control Decision. DEQ provides EPA and its partners an opportunity to review (but not approve or disapprove) the DEQ SCD; the status of this review is described in the column, Status of EPA Review of SCE Decision, in the Milestone Report.

[d] SCM = Source Control Measures. The final step in the source evaluation process; the implementation status of the SCMs is either complete, ongoing, not started, TBD, or NA.

[e] Adjacent sites are those with potential sources/pathways that are immediately adjacent to the reference AOPC, and upstream sites are those potential sources/pathways that are upstream of the reference AOPC and not reference with any other AOPC.

[f] This pathway is included for ECSI sites that have groundwater infiltration into the City storm sewer. For sites without this pathway, assume there is no groundwater infiltration into the City storm sewer.

p = DEQ's preliminary pathway determination
? = Unknown, typically due to lack of sampling information
Italicized cells indicate upland sites within current or former CSO basins. Non-italicized text indicates upland sites within stormwater basins.
Grey shading indicates shared conveyances.

Reference Citations:

CH2M Hill. 2008. Supplemental Remedial Investigation/Source Control Measures Evaluation Report. CH2M Hill, Portland, OR. August 2008.
City of Portland. 2010. Stormwater Evaluation Report, City of Portland Outfall Project, ECSI 2425. City of Portland, OR. February 2010.
DEQ. 2009. Portland Harbor Joint Source Control Strategy - Milestone Report. Prepared by the Oregon Department of Environmental Quality, Portland, OR. December 2009.

Acronyms:

AOC = Administrative Order of Consent
AOPC = area of potential concern
AS/SVE = air sparging/soil vapor extraction
AST = aboveground storage tank
BEHP = bis-2-(ethylhexyl) phthalate
BMP = best management practices
BnOH = benzyl alcohol
COI = chemical of interest
CSO = combined sewer overflow
DEQ = Oregon Department Of Environmental Quality
DNAPL = dense non-aqueous phase liquid
ECSI = Environmental Cleanup Site Inventory
EE/CA = engineering evaluation/cost analysis
EIB = in situ bioremediation
EPA = Environmental Protection Agency
FS = feasibility study
GRH = gasoline-range hydrocarbon
GW = groundwater
JSCS = Joint Source Control Strategy
MS4 = municipal separate storm sewer systems
NA = not applicable
NAPL = non-aqueous phase liquid
NFA = no further action
NPDES = National Pollutant Discharge Elimination System
NS = no sampling of upland COIs reported. For stormwater/wastewater, no sampling beyond permit requirements reported.
ODOT = Oregon Department Of Transportation
OERS = Oregon Emergency Response System
PAH = polycyclic aromatic hydrocarbon
PCB = polyclorinated biphenyl
PM = project manager
POTW = publicly owned treatment works
PPA = Prospective Purchaser Agreement
RI = remedial investigation
ROD = record of decision
RP = responsible party
SVOC = semivolatile organic compound
SW = stormwater
SWPCP = stormwater pollution control plan
TBT - tributyl tin
TCE = trichloroethene
TPH = total petroleum hydrocarbon
UIC = underground injection control
UST = underground storage tank
VOC = volatile organic compound
XPA = expanded preliminary assessment

Table 25. AOPC 25: Status of Adjacent or Immediately Upstream Current Ongoing and Potentially Ongoing Upland and Overwater Sources [a]

Site Name	Potential Contaminant Migration Pathway	DEQ PM	ECSI #	River Mile	AOPC	AOPC COIs	Upland and Overwater COIs	Potential Upland and Overwater Sources	DEQ Site Priority Level	DEQ Pathway Priority Level	Status of SCE
Ross Island/KF Jacobsen	Groundwater	Tarnow	TBD		25		TBD	Oct 2010: DEQ in discussion with RP to enter into letter agreement to evaluation stormwater and bank erosion pathways	TBD	TBD	TBD
Ross Island/KF Jacobsen	Stormwater						TBD		TBD	TBD	TBD
Ross Island/KF Jacobsen	Overwater						TBD		TBD	TBD	TBD
Ross Island/KF Jacobsen	Overland Transport						TBD		TBD	TBD	TBD
Ross Island/KF Jacobsen	Bank Erosion						TBD		TBD	TBD	TBD
CLD Pacific Grain/Cargill	Groundwater	Gainer	TBD		25		TBD	Oct 2010: DEQ in discussion with RP to enter into letter agreement to evaluation stormwater and bank erosion pathways	TBD	TBD	TBD
CLD Pacific Grain/Cargill	Stormwater						TBD		TBD	TBD	TBD
CLD Pacific Grain/Cargill	Overwater						TBD		TBD	TBD	TBD
CLD Pacific Grain/Cargill	Overland Transport						TBD		TBD	TBD	TBD
CLD Pacific Grain/Cargill	Bank Erosion						TBD		TBD	TBD	TBD
Glacier NW	Groundwater	Gainer	TBD		25		TBD	Oct 2010: DEQ in discussion with RP to enter into letter agreement to evaluation stormwater and bank erosion pathways	TBD	TBD	TBD
Glacier NW	Stormwater						TBD		TBD	TBD	TBD
Glacier NW	Overwater						TBD		TBD	TBD	TBD
Glacier NW	Overland Transport						TBD		TBD	TBD	TBD
Glacier NW	Bank Erosion						TBD		TBD	TBD	TBD
Shared Conveyance Systems											
OF43	Stormwater	Tarnow	2425	11.4E	25		TBD	**Current:** Drains 51 acres of light industry. See below for identified sources. **Future:** Basin will be reduced to about 16 acres in 2011.	TBD	TBD	Ongoing (expected 4th Q 2010)
Tucker Building	Stormwater	Voss	3036	11.3E	25		None	Site remediated in 2002 and is currently the N. Interstate Ramp	Low	Low	Complete (2004)

Table 25. AOPC 25: Status of Adjacent or Immediately Upstream Current Ongoing and Potentially Ongoing Upland and Overwater Sources [a]

Site Name	Potential Contaminant Migration Pathway	DEQ PM	ECSI #	River Mile	AOPC	AOPC COIs	Upland and Overwater COIs	Potential Upland and Overwater Sources	DEQ Site Priority Level	DEQ Pathway Priority Level	Status of SCE
Westinghouse/CBS	Stormwater	NA	4497	11.5E	25	**Metals** (Cu, Zn), **total PCBs**, **pesticides** (delta-HCH, dieldrin, endrin, endrin ketone, total DDx)	None	Site remediated in 2007 and is currently used for City Water Bureau parking	NA	NA	Site remediated under TSCA in 2008
Master Chemical	Stormwater	Fortuna	1302	11.5E	25		None	Facility handling sodium hydroxide (caustic), sodium hypochlorite solution (bleach), and chlorine gas			
Mammal Survey & Control Service	Stormwater	Crouse	1301	11.6E	25		Pesticide/herbicides	Pesticide manufacturing business			
Shopping Center Prop. - Nature's Fresh NW	Stormwater	Hafley	1855	11.5E	25		None	Site redeveloped in 2001 as a grocerty store. Former dry cleaner and gas station			Not tracked in Miles
Steve Adams Prop.	Stormwater	Kochan	1500	11.5E	25		PCBs	Residential house. Possible leakage from transformers on adjacent property			
Union Ave - PBC Site	Stormwater	Wistar	991	11.7E	25		None	PCB oil spill on street			Not tracked in Milestone Report. According to E
Wagstaff Battery Mrg. Co.	Stormwater	Roick	1243	11.6E	25		None	Site remediated in 2004. Former battery manufacturing facility, discharge of lead-contaminated runoff to dry well			Not tracked i
OF44	Stormwater	Tarnow	2425	11.2E	25		TBD	Drains 17 acres of light and heavy industry. See below for identified sources	TBD	TBD	Ongoing (expected 4th Qtr. 2010)
Tucker Building	Stormwater	Voss	3036	11.3E	25		None	Site remediated in 2002 and is currently the N. Interstate Ramp	Low	Low	Complete (2004)

Notes: See last page of table for full list of footnotes.

Table 25. AOPC 25: Status of Adjacent or Immediately Upstream Current Ongoing and Potentially Ongoing Upland and Overwater Sources [a]

Site Name	Potential Contaminant Migration Pathway	DEQ PM	ECSI #	River Mile	AOPC	AOPC COIs	Upland and Overwater COIs	Potential Upland and Overwater Sources	DEQ Site Priority Level	DEQ Pathway Priority Level	Status of SCE
PacifiCorp Albina Prop.	Stormwater	Hafley	5117	11.6E	25	**Metals** (Cu, Zn), **total PCBs**, **pesticides** (delta-HCH, dieldrin, endrin, endrin ketone, total DDx)	TPH, PCBs	Current electrical substation. Former shipyard and machine works property	Medium	p Medium	Ongoing (PA and SW SCE SOW under review)
	Groundwater Infiltration/ City Storm Sewer[g]						NS		Medium	pLow	Onoging (PA under review)
Valvoline	Stormwater	Coates	3215	11.2E	25		None	Site remediated in 2002 and is currently used for City Maintenance Bureau parking and seasonal indoor storage of deicing materials	Low	Low	Complete (2003)
Vermiculite NW Inc.	Stormwater	NA	2761	11.2E	25		None	Current warehouse. Former vermiculite handling facility, suspected asbestos contamination	Not tracked in Milestone		
OF44A	Stormwater	Tarnow	2425	11.3E	25		TBD	**Current:** Drains 70 residential acres and 36 mixed use (light industrial, major transportation and commercial) acres. **Future:** All stormwater except <1 acre (including all ECSI sites below) will be diverted to the tunnel in 2011.	TBD	TBD	Ongoing (expected 3rd Qtr. 2010)
PacifiCorp Knott Substation	Stormwater	Tarnow	5117	11.6E	25		PCBs	Active substation.	Medium	pLow	Ongoing (PA and SW SCE SOW under review)
Tarr Inc.	Stormwater	Coates	1139	11.3E	25		None	Bulk fuel and chemical storage, former USTs (decommissioned) and associated soil contamination (4,000 yd^3 removed), oil spill on nearby gravel lot, possible dry well			
Coverall Uniform Supply	Stormwater	Voss	1775	11.6E	25		None	Site covered by building; no outdoor exposure			
Standard Dairy	Stormwater	Miller	2055	11.5E	25		None	Site redeveloped about 2000 for mixed commercial and residential use			Not

Table 25. AOPC 25: Status of Adjacent or Immediately Upstream Current Ongoing and Potentially Ongoing Upland and Overwater Sources [a]

Site Name	Potential Contaminant Migration Pathway	DEQ PM	ECSI #	River Mile	AOPC	AOPC COIs	Upland and Overwater COIs	Potential Upland and Overwater Sources	DEQ Site Priority Level	DEQ Pathway Priority Level	Status of SCE
Abraham's Fabric Clinic	Stormwater	unassigned	4592	10.9E	25		None	No information is provided in ECSI			
Grant Warehouse	Stormwater	Greenburg	2385	11.3E	25		None	Current site is vacant and unpaved. Former contaminated warehouse has been removed			Not tracked in
McCann/Lenske Property	Stormwater	Greenburg	4711	11.3E	25		None	Current site is vacant and unpaved. Former battery manufacturing facility building demolished about 2006			
North Portland Bible College	Stormwater	Larsen	4354	10.4E	25		None	Current site is vacant and unpaved (since 1983). Former gas station and auto detailing shop, former USTs			NI
Numberg Scientific Co.	Stormwater	Kiernan	87	11.2E	25		None	Subsurface contamination. Site has been capped with clean fill since 1969.			
Portland Cleaning Works	Stormwater	Coates	3529	10.9E	25		None	Former dry cleaning business			

Notes: See last page of table for full list of footnotes.

OF45	Stormwater	Tarnow	2425	10.9E	25	**Metals** (Cu, Zn), **total PCBs**, **pesticides** (delta-HCH, dieldrin, endrin, endrin ketone, total DDx)	Copper (City of Portland 2010)	Drains 10 acres heavy and light industry.	Medium	p Medium	p Complete (2010)
UPRR Albina Railroad	Stormwater	Romero	173	10.3	25		TBD	Paved parking lot	Low	Low	Ongoing (draft SCE submitted to DEQ in August 2008. Revised SCE to be submitted in Fall 2010)

Table 25. AOPC 25: Status of Adjacent or Immediately Upstream Current Ongoing and Potentially Ongoing Upland and Overwater Sources [a]

Site Name	Potential Contaminant Migration Pathway	DEQ PM	ECSI #	River Mile	AOPC	AOPC COIs	Upland and Overwater COIs	Potential Upland and Overwater Sources	DEQ Site Priority Level	DEQ Pathway Priority Level	Status of SCE
WR-306	Stormwater	NA	NA	11.3E	25		?	ODOT outfall; basin has not been delineated	TBD	TBD	TBD

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Table 25. AOPC 25: Status of Adjacent or Immediately Upstream Current Ongoing and Potentially Ongoing Upland and Overwater Sources [a]

Site Name	Potential Contaminant Migration Pathway	DEQ PM	ECSI #	River Mile	AOPC	AOPC COIs	Upland and Overwater COIs	Potential Upland and Overwater Sources	DEQ Site Priority Level	DEQ Pathway Priority Level	Status of SCE

Notes:

[a] The information contained in this table is based on information obtained by LWG from correspondence with DEQ project managers and from reports in DEQ files as of ____ 2010. Information on sites upriver of RM 11 and sites within the s in the form of 104(e) information requests, and this is not a final list of sources that may be impacting the Study Area.

[b] SCE = Source Control Evaluation. This is the first step in DEQ's source evaluation process. The status of an SCE is either complete, ongoing, not started, TBD, or NA (for a pathway that is not applicable).

[c] SCD = Source Control Decision. DEQ provides EPA and its partners an opportunity to review (but not approve or disapprove) the DEQ SCD; the status of this review is described in the column, Status of EPA Review of SCE Decision, in th

[d] SCM = Source Control Measures. The final step in the source evaluation process; the implementation status of the SCMs is either complete, ongoing, not started, TBD, or NA.

[e] Adjacent sites are those with potential sources/pathways that are immediately adjacent to the reference AOPC, and upstream sites are those potential sources/pathways that are upstream of the reference AOPC and not reference with any other .

[f] This pathway is included for ECSI sites that have groundwater infiltration into the City storm sewer. For sites without this pathway, assume there is no groundwater infiltration into the City storm sewer.

p = DEQ's preliminary pathway determination
? = Unknown, typically due to lack of sampling information
Italicized cells indicate upland sites within current or former CSO basins. Non-italicized text indicates upland sites within stormwater basins.
Grey shading indicates shared conveyances.

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ECSI = Environmental Cleanup Site Inventory
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EIB = in situ bioremediation
EPA = Environmental Protection Agency
FS = feasibility study
GRH = gasoline-range hydrocarbon
GW = groundwater
JSCS = Joint Source Control Strategy
MS4 = municipal separate storm sewer systems
NA = not applicable
NAPL = non-aqueous phase liquid
NFA = no further action
NPDES = National Pollutant Discharge Elimination System
NS = no sampling of upland COIs reported. For stormwater/wastewater, no sampling beyond permit requirements reported.
ODOT = Oregon Department Of Transportation

Table 25. AOPC 25: Status of Adjacent or Immediatel

Site Name	Potential Contaminant Migration Pathway	SCE [b]		SCM Selection [d]			SCM Implementation and Effectiveness			
		SCD [c]	SCE Findings and Next Steps	Status of SCM Selection	SCD	Next Steps and Schedule	Status of SCM Implementation and Effectiveness	SCD	Next Steps and Schedule	Post-Construction Monitoring Results
Ross Island/KF Jacobsen	Groundwater	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
Ross Island/KF Jacobsen	Stormwater	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
Ross Island/KF Jacobsen	Overwater	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
Ross Island/KF Jacobsen	Overland Transport	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
Ross Island/KF Jacobsen	Bank Erosion	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
CLD Pacific Grain/Cargill	Groundwater	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
CLD Pacific Grain/Cargill	Stormwater	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
CLD Pacific Grain/Cargill	Overwater	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
CLD Pacific Grain/Cargill	Overland Transport	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
CLD Pacific Grain/Cargill	Bank Erosion	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
Glacier NW	Groundwater	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
Glacier NW	Stormwater	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
Glacier NW	Overwater	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
Glacier NW	Overland Transport	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
Glacier NW	Bank Erosion	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
Shared Conveyance Systems										
OF43	Stormwater	TBD	Interim SCMs (e.g. line cleaning) implemented by City in area to be diverted. Area to continue discharging to river currently being evaluated to determine if any significant sources. The only ECSI site that will continue to discharge is the Tucker Building site	TBD	TBD	TBD	TBD	TBD	TBD	TBD
Tucker Building	Stormwater	Insignificant Pathway (NFA 2004)	NA	NA	NA	NA	NA	NA	NA	NA

Table 25. AOPC 25: Status of Adjacent or Immediatel

Site Name	Potential Contaminant Migration Pathway	SCE [b]		SCM Selection [d]			SCM Implementation and Effectiveness			
		SCD [c]	SCE Findings and Next Steps	Status of SCM Selection	SCD	Next Steps and Schedule	Status of SCM Implementation and Effectiveness	SCD	Next Steps and Schedule	Post-Construction Monitoring Results
Westinghouse/CBS	Stormwater	Insignificant Pathway	Stormwater treatment added during redevelopment. Waiting for EPA TSCA approval letter . To be diverted to tunnel in 2011	NA	NA	NA	NA	NA	NA	NA
Master Chemical	Stormwater	Not tracked in Milestone Report. To be diverted to tunnel in 2011 NFA (1995)								
Mammal Survey & Control Service	Stormwater	Not tracked in Milestone Report To be diverted to tunnel in 2011 - no additional info available								
Shopping Center Prop. - Nature's Fresh NW	Stormwater	stone Report. Decommisioning of old catch basins and redevelopment. Residual PCE vapors still detected. To be diverted to tunnel in 2011								
Steve Adams Prop.	Stormwater	Not tracked in Milestone Report. <1 ppm PCBs found in soils. NFA (1993). To be diverted to tunnel in 2011								
Union Ave - PBC Site	Stormwater	PA Potential Hazardous Waste Site Identification form, dated 7/23/87, the streets and contaminated autos were cleaned up to background levels under CERCLA authority. NFA (1995). To be diverted to tunnel in 2011								
Wagstaff Battery Mrg. Co.	Stormwater	n Milestone Report. As part of site remediation soil removed and site capped to prevent stormwater exposure from site contaminants. NFA (2005). To be diverted to tunnel in 2011								
OF44	Stormwater	TBD	One site entered Cleanup program based on source tracing efforts	TBD	TBD	TBD	TBD	TBD	TBD	TBD
Tucker Building	Stormwater	Insignificant Pathway (NFA 2004)	NA	NA	NA	NA	NA	NA	NA	NA

Notes: See last page of table for full list of footnotes.

Table 25. AOPC 25: Status of Adjacent or Immediatel

Site Name	Potential Contaminant Migration Pathway	SCE [b]		SCM Selection [d]			SCM Implementation and Effectiveness			
		SCD [c]	SCE Findings and Next Steps	Status of SCM Selection	SCD	Next Steps and Schedule	Status of SCM Implementation and Effectiveness	SCD	Next Steps and Schedule	Post-Construction Monitoring Results
PacifiCorp Albina Prop.	Stormwater	TBD (anticipated 1st Qtr. 2011)	TBD (waiting on SCE to be completed)	Selected soil removals in progress	TBD	TBD	TBD	TBD	TBD	TBD
	Groundwater Infiltration/ City Storm Sewer[g]	TBD (anticipated 4th Qtr. 2010)	TBD (waiting on PA review to be completed)	TBD	TBD	TBD	TBD	TBD	TBD	TBD
Valvoline	Stormwater	Insignificant Pathway (NFA 2003)	NA	NA	NA	NA	NA	NA	NA	NA
Vermiculite NW Inc.	Stormwater	Report. DEQ remediation of building in 2001, additional EPA-led cleanup conducted in 2006 (http://www.oregon.gov/DHS/ph/ehap/fvsite.shtml)								
OF44A	Stormwater	TBD	All stormwater except one permitted site will be diverted to the tunnel in 2011.	TBD	TBD	TBD	TBD	TBD	TBD	TBD
PacifiCorp Knott Substation	Stormwater	TBD (anticipated 4th Qtr. 2010)	TBD (waiting on PA/SCE review to be completed)	TBD	TBD	TBD	TBD	TBD	TBD	TBD
Tarr Inc.	Stormwater	Not tracked in Milestone Report. Contamination associated with subsurface soils and groundwater. Site stormwater to be diverted to tunnel in 2011								
Coverall Uniform Supply	Stormwater	Not tracked in Milestone Report. Subsurface contamination under building removed . NFA (1996). Site stormwater to be diverted to tunnel in 2011								
Standard Dairy	Stormwater	tracked in Milestone Report. Prior to paving/redevelopment, no evidence of aboveground releases were apparently observed. NFA (2010). Site stormwater to be diverted to tunnel in 2011								

Table 25. AOPC 25: Status of Adjacent or Immediatel

Site Name	Potential Contaminant Migration Pathway	SCE [b]		SCM Selection [d]			SCM Implementation and Effectiveness			
		SCD [c]	SCE Findings and Next Steps	Status of SCM Selection	SCD	Next Steps and Schedule	Status of SCM Implementation and Effectiveness	SCD	Next Steps and Schedule	Post-Construction Monitoring Results
~~*Abraham's Fabric Clinic*~~	Stormwater	Not tracked in Milestone Report. [Remedial action taken in 2006 - need more info] Site stormwater to be diverted to tunnel in 2011								
Grant Warehouse	Stormwater	Milestone Report. EPA-led cleanup included building demolition and soil removal to non-detect or resdiential risk-based concentrations NFA (1995). Site stormwater to be diverted to tunnel in 2011								
McCann/Lenske Property	Stormwater	Not tracked in Milestone Report. Contaminated soil removed from site. NFA (2007) . Site stormwater to be diverted to tunnel in 2011								
North Portland Bible College	Stormwater	Not tracked in Milestone Report. FA (2006) concluded no pathways for environmental and human receptors. Site stormwater to be diverted to tunnel in 2011								
Numberg Scientific Co.	Stormwater	Not tracked in Milestone Report. No stormwater exposure since 1969. NFA (1997). Site stormwater to be diverted to tunnel in 2011								
Portland Cleaning Works	Stormwater	Not tracked in Milestone Report. Contamination associated with subsurface soils and groundwater. Site stormwater to be diverted to tunnel in 2011								

Notes: See last page of table for full list of footnotes.

OF45	Stormwater	p Complete Pathway	SCE ongoing at Cleanup site (see below)	Ongoing	Line cleaning conducted of trunk lines. City identified one facility with illicit discharge of copper to system and required them to reroute to sanitary. See below for identified ECSI sites.	Once site has completed SCE, City will prepare RI/SCM document	Continue City MS4 and watershed SC programs to improve stormwater quality	TBD	TBD	TBD
UPRR Albina Railroad	Stormwater	TBD	Additional information of parking lot area to be included in the Final RI/SCE report, Fall 2010 (DEQ PM and CH2MHill)	TBD	TBD	TBD	TBD	TBD	TBD	TBD

Table 25. AOPC 25: Status of Adjacent or Immediatel

Site Name	Potential Contaminant Migration Pathway	SCE [b]		SCM Selection [d]			SCM Implementation and Effectiveness			
		SCD [c]	SCE Findings and Next Steps	Status of SCM Selection	SCD	Next Steps and Schedule	Status of SCM Implementation and Effectiveness	SCD	Next Steps and Schedule	Post-Construction Monitoring Results
WR-306	Stormwater	TBD	Status of Basin-wide Investigation? Additional Outfall and Up-the-Pipe Investigations?	TBD	Outfall SCM Controls being Designed, Constructed, or Monitored?	TBD	TBD	TBD	TBD	TBD

Notes: See last page of table for full list of footnotes.

Table 25. AOPC 25: Status of Adjacent or Immediatel

Site Name	Potential Contaminant Migration Pathway	SCE [b]		SCM Selection [d]			SCM Implementation and Effectiveness			
		SCD [c]	SCE Findings and Next Steps	Status of SCM Selection	SCD	Next Steps and Schedule	Status of SCM Implementation and Effectiveness	SCD	Next Steps and Schedule	Post-Construction Monitoring Results
Notes:										

[a] The information contained in this table is based on info shared stormwater conveyance systems is from RI Table 4.4-4 and from the DEQ ECSI database. Please note that source inventory is an ongoing process by DEQ and EPA, in the form of 104(e) information requests, and this is nc

[b] SCE = Source Control Evaluation. This is the first step

[c] SCD = Source Control Decision. DEQ provides EPA æ Milestone Report.

[d] SCM = Source Control Measures. The final step in the

[e] Adjacent sites are those with potential sources/pathway AOPC.

[f] This pathway is included for ECSI sites that have groun

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BMP = best management practices
BnOH = benzyl alcohol
COI = chemical of interest
CSO = combined sewer overflow
DEQ = Oregon Department Of Environmental Quality
DNAPL = dense non-aqueous phase liquid
ECSI = Environmental Cleanup Site Inventory
EE/CA = engineering evaluation/cost analysis
OERS = Oregon Emergency Response System
PAH = polycyclic aromatic hydrocarbon
PCB = polyclorinated biphenyl
PM = project manager
POTW = publicly owned treatment works
PPA = Prospective Purchaser Agreement
RI = remedial investigation
ROD = record of decision
RP = responsible party
SVOC = semivolatile organic compound
SW = stormwater
SWPCP = stormwater pollution control plan
TBT - tributyl tin
TCE = trichloroethene
TPH = total petroleum hydrocarbon
UIC = underground injection control
UST = underground storage tank
VOC = volatile organic compound
XPA = expanded preliminary assessment

Table 26. AOPC 26: Status of Adjacent or Immediately Upstream Current Ongoing and Potentially Ongoing Upland and Overwater Sources [a]

Site Name	Potential Contaminant Migration Pathway	DEQ PM	ECSI #	River Mile	AOPC	AOPC COIs	Upland and Overwater COIs	Potential Upland and Overwater Sources	DEQ Site Priority Level	DEQ Pathway Priority Level	Status of SCE
Sources Adjacent to AOPC 26 [e]											
POP Terminal 1 South (Riverscape) (No longer owned by Port)	Groundwater	McClincy	2642	10.9W	26	**Metals** (Al, As, Pb, Hg, Se), Butyltin, **PAHs** [benzo(a)pyrene, dibenzo(a,h)anthracene, total cPAHs], BEHP, HCB, **PCBs** (total PCBs, total PCB TEQ), **Dioxin/Furans** (total dioxin TEQ, total TEQ), **Pesticides** (aldrin, dieldrin, total chlordane, total DDD, total DDE, total DDT)	NA	No known sources.	NFA, Low	Low	Complete (2002)
POP Terminal 1 South (Riverscape) (No longer owned by Port)	Stormwater						None reported			Low	Incomplete pathway
POP Terminal 1 South (Riverscape) (No longer owned by Port)	Overwater						NS			Low	Complete (2001)
POP Terminal 1 South (Riverscape) (No longer owned by Port)	Overland Transport						NA			Low	Complete (2001)
POP Terminal 1 South (Riverscape) (No longer owned by Port)	Bank Erosion						NS			Low	Complete (2001)
Shared Conveyance Systems											
WR-307	Stormwater	NA	NA	11.2W	26	**Metals** (Al, As, Pb, Hg, Se), Butyltin, **PAHs** [benzo(a)pyrene, dibenzo(a,h)anthracene, total cPAHs], BEHP, HCB, **PCBs** (total PCBs, total PCB TEQ), **Dioxin/Furans** (total dioxin TEQ, total TEQ), **Pesticides** (aldrin, dieldrin, total chlordane, total DDD, total DDE, total DDT)	?	ODOT outfall; basin has not been delineated	TBD	TBD	TBD
Upstream Shared Conveyance Systems											

Table 26. AOPC 26: Status of Adjacent or Immediately Upstream Current Ongoing and Potentially Ongoing Upland and Overwater Sources [a]

Site Name	Potential Contaminant Migration Pathway	DEQ PM	ECSI #	River Mile	AOPC	AOPC COIs	Upland and Overwater COIs	Potential Upland and Overwater Sources	DEQ Site Priority Level	DEQ Pathway Priority Level	Status of SCE
OF11	Stormwater	Tarnow	2425	11.4W	26	**Metals** (Al, As, Pb, Hg, Se), Butyltin, **PAHs** [benzo(a)pyrene, dibenzo(a,h)anthracene, total cPAHs], BEHP, HCB, **PCBs** (total PCBs, total PCB TEQ), **Dioxin/Furans** (total dioxin TEQ, total TEQ), **Pesticides** (aldrin, dieldrin, total chlordane, total DDD, total DDE, total DDT)	TBD	Currently drains 365 acres residential, 76 acres major transportation, 52 acres industrial, and 38 acres commercial. Almost all industrial properties in storm basin are in DEQ Cleanup (see below). All ECSI sites in former CSO basin have been routed to the tunnel (overflow diversions sealed).	TBD	TBD	Ongoing (1st Qtr 2011)
Hoyt St. Railroad (former)	Stormwater	Greenburg	1080	11.6W	26		None reported	Former railyard and fueling facilities, former ASTs and USTs	Not tracked in Milestone Report - ROD (12-00);		
Hoyt St. Trainyard Parcel 1	Stormwater	Greenburg	1624	11.6W	26		None reported	Foundry and railyard (no fueling)			
Pearl Block	Stormwater	Greenburg	4960	11.6W	26		None reported	Foundry and railyard (no fueling)			
Sylvan Cleaners	Stormwater	Gilles	1897	11.5W	26		None	Former service station, VOC-contaminated groundwater			

Notes: See last page of table for full list of footnotes.

Table 26. AOPC 26: Status of Adjacent or Immediately Upstream Current Ongoing and Potentially Ongoing Upland and Overwater Sources [a]

Site Name	Potential Contaminant Migration Pathway	DEQ PM	ECSI #	River Mile	AOPC	AOPC COIs	Upland and Overwater COIs	Potential Upland and Overwater Sources	DEQ Site Priority Level	DEQ Pathway Priority Level	Status of SCE
Union Station Agric. Marketing Ctr. - Yards Parcel A North	Stormwater	Greenburg	1962	11.6W	26	**Metals** (Al, As, Pb, Hg, Se), Butyltin, **PAHs** [benzo(a)pyrene, dibenzo(a,h)anthracene, total cPAHs], BEHP, HCB, **PCBs** (total PCBs, total PCB TEQ), **Dioxin/Furans** (total dioxin TEQ, total TEQ), **Pesticides** (aldrin, dieldrin, total chlordane, total DDD, total DDE, total DDT)	None	All tax lots capped; 1 has been redeveloped as OSU Food Innovation Ctr and 3 are vacant. Former rail yard, contaminated dredge fill			Not tracked in Miles
Union Station Horse Barn - Station Place	Stormwater	Hafley	2407	11.6W	26		None	All tax lots capped; 4 have been redeveloped as residential and commercial and 3 are vacant. Fomer rail yard, manufactured gas plant (south)			Not tracked in Milestone Repo
Union Station Track #5	Stormwater	Roick	1414	11.6W	26		None	Current active train track. Additional stormwater improvements currently underway. Former train diesel refueling area,			Not tracked in Milesto
Yards at Union Station - Parcel B South	Stormwater	Hafley	1885	11.8	26		None	Multiple lots redeveloped as residential; one tax lot capped and vacant. Former rail yard			Not tracked in Milestone Report.
US Postal Processing & Distribution	Stormwater	Hafley	2183	11.7W	26		VOCs PAHs, TPH, metals	Former rail yard and fueling facilities, former ASTs and USTs			
Dan Rasmussen Co	Stormwater	Fortuna	1684	11.7W	26		None – cannot discharge to OF 11	Former leaking UST			
Dynagraphics Inc.	Stormwater	Harman	4523	11.7W	26		None – cannot discharge to OF 11	Printing press spills			
Esquire Motors	Stormwater	Pugh	4906	11.8W	26		None – cannot discharge to OF 11	Former service station, feedstore, aluminum manufacturer printing company, and most recently as an auto repair garage			
Gender Machine Works	Stormwater	Anderson	2313	11.4W	26		None – cannot discharge to OF 11	Former foundry and machine shop, soil contamination			
Lu Yen Restaurant (former)	Stormwater	Anderson	2197	11.8W	26		None – cannot discharge to OF 11	Petroleum-contaminted soil			
Pacific States Galvanizing (former)	Stormwater	Bayuk	1024	11.4W	26		None – cannot discharge to OF 11	Former zinc galvanizing operations			

Table 26. AOPC 26: Status of Adjacent or Immediately Upstream Current Ongoing and Potentially Ongoing Upland and Overwater Sources [a]

Site Name	Potential Contaminant Migration Pathway	DEQ PM	ECSI #	River Mile	AOPC	AOPC COIs	Upland and Overwater COIs	Potential Upland and Overwater Sources	DEQ Site Priority Level	DEQ Pathway Priority Level	Status of SCE
RiverTec Property	Stormwater	Blakeman	3067	11.6W	26		None – cannot discharge to OF 11	Possible former lead smelting facility			
Unocal Service Station #0738	Stormwater	Monroe	1396	11.2W	26		None – cannot discharge to OF 11	Service station and USTs			
Wilbur-Ellis Co	Stormwater	Harman	1331	11.6W	26		None – cannot discharge to OF 11	Former warehouse and distribution center for agricultural chemicals and fertilizer, some pesticide formulation			
OF13	Stormwater	Tarnow	2425	11.1W	24		TBD	Currently drains about 6 acres (residential and heavy industrial). Most industrial property is gravel and therefore does not produce signficant runoff. No ECSI sites have been identified in basin.	Low	p Low	Ongoing (expected 4th Qtr 2010

Notes: See last page of table for full list of footnotes.

Table 26. AOPC 26: Status of Adjacent or Immediately Upstream Current Ongoing and Potentially Ongoing Upland and Overwater Sources [a]

Site Name	Potential Contaminant Migration Pathway	DEQ PM	ECSI #	River Mile	AOPC	AOPC COIs	Upland and Overwater COIs	Potential Upland and Overwater Sources	DEQ Site Priority Level	DEQ Pathway Priority Level	Status of SCE

Notes:

[a] The information contained in this table is based on information obtained by LWG from correspondence with DEQ project managers and from reports in DEQ files as of ____ 2010. Information on sites upriver of RM 11 and sites within the s in the form of 104(e) information requests, and this is not a final list of sources that may be impacting the Study Area.

[b] SCE = Source Control Evaluation. This is the first step in DEQ's source evaluation process. The status of an SCE is either complete, ongoing, not started, TBD, or NA (for a pathway that is not applicable).

[c] SCD = Source Control Decision. DEQ provides EPA and its partners an opportunity to review (but not approve or disapprove) the DEQ SCD; the status of this review is described in the column, Status of EPA Review of SCE Decision, in th

[d] SCM = Source Control Measures. The final step in the source evaluation process; the implementation status of the SCMs is either complete, ongoing, not started, TBD, or NA.

[e] Adjacent sites are those with potential sources/pathways that are immediately adjacent to the reference AOPC, and upstream sites are those potential sources/pathways that are upstream of the reference AOPC and not reference with any other .

[f] This pathway is included for ECSI sites that have groundwater infiltration into the City storm sewer. For sites without this pathway, assume there is no groundwater infiltration into the City storm sewer.

p = DEQ's preliminary pathway determination
? = Unknown, typically due to lack of sampling information
Italicized cells indicate upland sites within current or former CSO basins. Non-italicized text indicates upland sites within stormwater basins.
Grey shading indicates shared conveyances.

Reference Citations:

City of Portland. 2010. Stormwater Evaluation Report, City of Portland Outfall Project, ECSI 2425. City of Portland, OR. February 2010.
DEQ. 2009. Portland Harbor Joint Source Control Strategy - Milestone Report. Prepared by the Oregon Department of Environmental Quality, Portland, OR. December 2009.

Acronyms:

AOC = Administrative Order of Consent
AOPC = area of potential concern
AS/SVE = air sparging/soil vapor extraction
AST = aboveground storage tank
BEHP = bis-2-(ethylhexyl) phthalate
BMP = best management practices
BnOH = benzyl alcohol
COI = chemical of interest
CSO = combined sewer overflow
DEQ = Oregon Department Of Environmental Quality
DNAPL = dense non-aqueous phase liquid
ECSI = Environmental Cleanup Site Inventory
EE/CA = engineering evaluation/cost analysis
EIB = in situ bioremediation
EPA = Environmental Protection Agency
FS = feasibility study
GRH = gasoline-range hydrocarbon
GW = groundwater
JSCS = Joint Source Control Strategy
MS4 = municipal separate storm sewer systems
NA = not applicable
NAPL = non-aqueous phase liquid
NFA = no further action
NPDES = National Pollutant Discharge Elimination System
NS = no sampling of upland COIs reported. For stormwater/wastewater, no sampling beyond permit requirements reported.
ODOT = Oregon Department Of Transportation
OERS = Oregon Emergency Response System
PAH = polycyclic aromatic hydrocarbon
PCB = polyclorinated biphenyl
PM = project manager
POTW = publicly owned treatment works
PPA = Prospective Purchaser Agreement
RI = remedial investigation
ROD = record of decision
RP = responsible party
SVOC = semivolatile organic compound
SW = stormwater
SWPCP = stormwater pollution control plan
TBT - tributyl tin
TCE = trichloroethene
TPH = total petroleum hydrocarbon
UIC = underground injection control
UST = underground storage tank
VOC = volatile organic compound
XPA = expanded preliminary assessment

Table 26. AOPC 26: Status of Adjacent or Immediatel

Site Name	Potential Contaminant Migration Pathway	SCE [b]		SCM Selection [d]			SCM Implementation and Effectiveness			
		SCD [c]	SCE Findings and Next Steps	Status of SCM Selection	SCD	Next Steps and Schedule	Status of SCM Implementation and Effectiveness	SCD	Next Steps and Schedule	Post-Construction Monitoring Results
Sources Adjacent to AOPC 26 [e]										
POP Terminal 1 South (Riverscape) (No longer owned by Port)	Groundwater	Insignificant Pathway	No actions recommended, no SCMs needed	NA	NA	NA	NA	NA	NA	NA
POP Terminal 1 South (Riverscape) (No longer owned by Port)	Stormwater	Insignificant Pathway	No actions recommended, no SCMs needed	NA	NA	NA	NA	NA	NA	NA
POP Terminal 1 South (Riverscape) (No longer owned by Port)	Overwater	Insignificant Pathway	No actions recommended, no SCMs needed	NA	NA	NA	NA	NA	NA	NA
POP Terminal 1 South (Riverscape) (No longer owned by Port)	Overland Transport	Insignificant Pathway	No actions recommended, no SCMs needed	NA	NA	NA	NA	NA	NA	NA
POP Terminal 1 South (Riverscape) (No longer owned by Port)	Bank Erosion	Insignificant Pathway	No actions recommended, no SCMs needed	NA	NA	NA	NA	NA	NA	NA
Shared Conveyance Systems										
WR-307	Stormwater	TBD	Status of Basin-wide Investigation? Additional Outfall and Up-the-Pipe Investigations?	TBD	Outfall SCM Controls being Designed, Constructed, or Monitored?	TBD	TBD	TBD	TBD	TBD
Upstream Shared Conveyance Systems										

Table 26. AOPC 26: Status of Adjacent or Immediatel

Site Name	Potential Contaminant Migration Pathway	SCE [b]		SCM Selection [d]			SCM Implementation and Effectiveness			
		SCD [c]	SCE Findings and Next Steps	Status of SCM Selection	SCD	Next Steps and Schedule	Status of SCM Implementation and Effectiveness	SCD	Next Steps and Schedule	Post-Construction Monitoring Results
OF11	Stormwater	TBD	Portion of basin diverted to tunnel in 2006. Baseflow and stormwater currently being monitored by the City. Industrial area currently in transition to commercial & residential with all redevelopment requiring stormwater controls under Manual	TBD	TBD	TBD	TBD	TBD	TBD	TBD
Hoyt St. Railroad (former)	Stormwater	CD (01-02); Block 10 Closure PPA #00-08; Soil Closure Blocks 8, 10, 11 and 12 (DEQ 9-02); Soil Closure Blocks 13, 16, 18, 21 (DEQ 12-04); Soil Closure Blocks 9, 14, 19 (10-06); Stormwater Closure (DEQ 5-08); Groundwater Closure (in prep.) No current pathways (site capped)								
Hoyt St. Trainyard Parcel 1	Stormwater	Not tracked in Milestone Report. Closed –PPA #96-08 (9-96) No current pathways (site capped)								
Pearl Block	Stormwater	Not tracked in Milestone Report. No current pathways (site capped) NFA (2008)								
Sylvan Cleaners	Stormwater	Not tracked in Milestone Report. Contamination was subsurface and not expected to affect stormwater. NFA (2004)								

Notes: See last page of table for full list of footnotes.

Table 26. AOPC 26: Status of Adjacent or Immediatel

Site Name	Potential Contaminant Migration Pathway	SCE [b]		SCM Selection [d]			SCM Implementation and Effectiveness			
		SCD [c]	SCE Findings and Next Steps	Status of SCM Selection	SCD	Next Steps and Schedule	Status of SCM Implementation and Effectiveness	SCD	Next Steps and Schedule	Post-Construction Monitoring Results
Union Station Agric. Marketing Ctr. - Yards Parcel A North	Stormwater	tone Report. ROD 1998. Stormwater exposure to site contaminants eliminated. 1 tax lot has been remediated and redeveloped (NFA 2000). 3 tax lots have temporary caps pending redevelopment.								
Union Station Horse Barn - Station Place	Stormwater	rt. ROD 2003. Stormwater exposure to site contaminants eliminated. 4 tax lots have been remediated and redeveloped (NFAs either issued or pending). 3 tax lots have temporary caps pending redevelopment.								
Union Station Track #5	Stormwater	he Report. NFA 1997. Two spills remediated , including soil removal, in 1992 and 1997. Stormwater exposure to site contaminants eliminated.								
Yards at Union Station - Parcel B South	Stormwater	ROD 1996. Stormwater exposure to site contaminants eliminated. Multiple tax lots have been remediated and redeveloped (NFAs in 2002, 2003, 2004). 1 tax lot has temporary cap pending redevelopment.								
US Postal Processing & Distribution	Stormwater	Not tracked in Milestone Report ROD (2009)								
Dan Rasmussen Co	Stormwater	Not tracked in Milestone Report								
Dynagraphics Inc.	Stormwater	Not tracked in Milestone Report								
Esquire Motors	Stormwater	Not tracked in Milestone Report								
Gender Machine Works	Stormwater	Not tracked in Milestone Report NFA (2002)								
Lu Yen Restaurant (former)	Stormwater	Not tracked in Milestone Report NFA (1998)								
Pacific States Galvanizing (former)	Stormwater	Not tracked in Milestone Report								

Table 26. AOPC 26: Status of Adjacent or Immediatel

Site Name	Potential Contaminant Migration Pathway	SCE [b]		SCM Selection [d]			SCM Implementation and Effectiveness			
		SCD [c]	SCE Findings and Next Steps	Status of SCM Selection	SCD	Next Steps and Schedule	Status of SCM Implementation and Effectiveness	SCD	Next Steps and Schedule	Post-Construction Monitoring Results
RiverTec Property	Stormwater	Not tracked in Milestone Report								
Unocal Service Station #0738	Stormwater	Not tracked in Milestone Report NFA (2000)								
Wilbur-Ellis Co	Stormwater	Not tracked in Milestone Report NFA (2008)								
OF13	Stormwater	p Insignificant Pathway	Most of basin (except 6 acres) diverted to Tunnel in 2006. SCE to be submitted to DEQ.	TBD	TBD	TBD	TBD	TBD	TBD	TBD

Notes: See last page of table for full list of footnotes.

Table 26. AOPC 26: Status of Adjacent or Immediatel

Site Name	Potential Contaminant Migration Pathway	SCE [b]		SCM Selection [d]			SCM Implementation and Effectiveness			
		SCD [c]	SCE Findings and Next Steps	Status of SCM Selection	SCD	Next Steps and Schedule	Status of SCM Implementation and Effectiveness	SCD	Next Steps and Schedule	Post-Construction Monitoring Results

Notes:

[a] ~~The information contained in this table is based on info~~shared stormwater conveyance systems is from RI Table 4.4-4 and from the DEQ ECSI database. Please note that source inventory is an ongoing process by DEQ and EPA, in the form of 104(e) information requests, and this is nc

[b] SCE = Source Control Evaluation. This is the first step

[c] SCD = Source Control Decision. DEQ provides EPA æ Milestone Report.

[d] SCM = Source Control Measures. The final step in the

[e] Adjacent sites are those with potential sources/pathway AOPC.

[f] This pathway is included for ECSI sites that have groun

p = DEQ's preliminary pathway determination
? = Unknown, typically due to lack of sampling informa
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DNAPL = dense non-aqueous phase liquid
ECSI = Environmental Cleanup Site Inventory
EE/CA = engineering evaluation/cost analysis
EIB = in situ bioremediation
EPA = Environmental Protection Agency
FS = feasibility study
GRH = gasoline-range hydrocarbon
GW = groundwater
JSCS = Joint Source Control Strategy
MS4 = municipal separate storm sewer systems
NA = not applicable
NAPL = non-aqueous phase liquid
NFA = no further action